Will the voters curb labor?

(Page 147)

## BUSINESS WEEK

A McGRAW-HILL PUBLICATION

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OCT. 18, 1958

Harry Oppenheimer's "benevolent monopoly" controls diamonds. But can it hold its grip? (Business Abroad)

6 3

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	1958				140
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	hy	IN			130
	~				120
1953 1954 1955 1956 1957 <sup>J</sup> F	MAM	· · · · · · · ·	A S	0 N	110
HOLLEGO MATERIA INIDEN	1946 Average	Year Ago	Month Ago	Week Ago	§ Lat
USINESS WEEK INDEX (chart)	91.6	141.0	132.9	†135.1	*135
ODUCTION					
iteel ingot (thous. of tons)	1,281 62,880	2,070 59,746	1,771 32,097	†1,933 †53,567	1,9 50,9
ngineering const. awards (Eng. News-Rec. 4-wk. daily av. in thous.)	\$17,083	\$54,661	\$59,794	\$64,660	\$61,1
lectric power (millions of kilowatt-hours)	4,238	11,709	12,248	12,111	12,0
rude oil and condensate (daily av., thous. of bbls.)	4,751	6,729	7,009 1,404	7,014 1,483	6,8
Bituminous coal (daily av., thous. of tons)	1,745 167,269	1,658	305,978	308,845	308,
ADE	,				
Carloadings: mfrs., miscellaneous and l.c.l. (daily av., thous. of cars)	82	69	64	63	
Carloadings: mirs., miscenaneous and i.c.s. (adily av., thous. of cars)	53	55	49	49	
Department store sales index (1947-49 = 100, not seasonally adjusted) Business failures (Dun & Bradstreet, number)	90 22	136 244	123 256	136 301	
TICES					
spot commodities, daily index (Moody's, Dec. 31, 1931 = 100)	311.9	387.7	392.4	389.2	38
Industrial raw materials, daily index (BLS, 1947-49 = 100)	††73.2 ††75.4	86.7 81.9	85.9 86.2	86.9 84.4	8
Foodstuffs, daily index (BLS, 1947-49 = 100)	17.5¢	17.7¢	17.7¢	17.6¢	17
Finished steel, index (BLS, 1947-49 = 100)	††76.4	181.7	186.6	186.6	18
Scrap steel composite (Iron Age, ton)	\$20.27	\$37.33	\$43.17	\$42.83	\$42
Copper (electrolytic, delivered price, E & MJ, lb.)	14.045¢	26.770¢	26.485¢	26.525¢	27.0
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	\$1.97	\$2.14	\$1.93	\$1.98	\$1
Cotton, daily price (middling, 1 in., 14 designated markets, lb.)	**30.56¢ \$1.51	33.48¢ #	34.66¢ \$1.68	34.76¢ \$1.60	34. \$1
NANCE					
500 stocks composite, price index (S&P's, 1941-43 = 10)	17.08	41.23	48.96	50.65	51
Medium grade corporate bond yield (Baa issues, Moody's) Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate)	3.05% 34-1%	4.97%	4.89%	4.93% 3¼%	31/
ANKING (Millions of Dollars)					
Demand deposits adjusted, reporting member banks	††45,820	54,344	56,719	55,967	55,
Total leans and investments, reporting member banks	††71,916	87,267	94,703	93,595	94,
Commercial and agricultural loans, reporting member banks  U. S. gov't guaranteed obligations held, reporting member banks	††9,299 ††49,879	32,137 25,324	30,084	30,287	30,
Total federal reserve credit outstanding	23,888	25,563	26,661	26,275	26,
ONTHLY FIGURES OF THE WEEK		1946 Average	Year Ago	Month Ago	Lat
Housing starts (in thousands)September		55.9	91.9	119.0	11
Personal income (seasonally adjusted, in billions)September		\$178.0	\$351.4	\$356.1	\$3.
Farm income (seasonally adjusted, in billions)		\$16.9	\$15.3	\$16.9	\$
Employment (in millions)September		55.2 2.3	65.7 2.6	65.4 4.7	
Inemployment (in millions)					
Unemployment (in millions)		\$43.82		\$84.35	\$8
			\$82.99 118.0		\$8:

THE PICTURES—Cover—Guido Organschi; 25—Grant Compton; 28, 29— Howard Staples; 31—North American Aviation Inc.; 44—Brown Bros.; 76—(top) Edith Miller, (bot.) Chicago Helicopter Airways; 78—Vertol Aircraft Corp.; 83—Edith Miller; 99—Seiridge & Lee; 105—Ed Nano; 106—(top) Ed Nano, (bot.) Black Star; 124, 125—Guido Organschi; 134—Anderson & Cairns, Inc.; 154—U.P.I.; 163—Noel Clark; 165—(top) It. & bot.) Noel Clark, (top rt.) Grant Compton.

<sup>\*</sup> Preliminary, week ended October II, 1958.
† Estimate.
† Revised.

† Estimate, middling | in.

† Insufficient trading to establish a price.

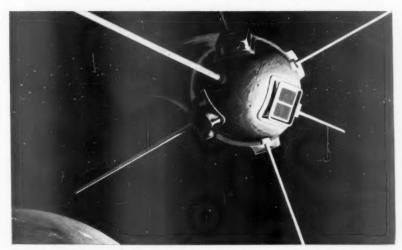
# How the Bell System's Transistor Has Created Business and Jobs in Many Industries

It has been just a little over ten years since the Bell Telephone Laboratories announced the invention of the Transistor.

This amazing little electronic amplifier was recognized immediately as one of the big breakthroughs in science that come only at rare intervals. Every year since its birth it has opened new fields of use and progress.

Developed originally for telephony, where its first use was in Direct Distance Dialing, the Transistor has enabled many other industries to bring out entirely new products and improve others. It has also made it possible for a number of new businesses to get started and to grow.

There is no doubt that the Transistor has been one of the leading forces in an electronics boom and is in considerable part responsible for raising the electronics industry from a two billion dollar level in 1946 to over thirteen billion dollars in 1958.



NEWS FROM OUTER SPACE. One of the many uses for the Transistor is in the radio transmitters in satellites. Some other uses of this mighty mite of electronics, in addition to its growing use in telephony, are in hearing aids, personal radios, automobile radios, portable TV sets, phonographs, clocks, watches, toys, computers, data processing, machine tooling controls and even a guidance system for a chicken-feeding cart. A most important use is in a wide range of military equipment, including radar and guidance systems for missiles. Though little larger than a pea, the Transistor can amplify electric signals up to 100,000 times.

The Bell System has licensed more than seventy companies to make and sell transistors. More than 50,000,000 will be made this year.

The Transistor is just one example of how the basic research of the Bell Telephone Laboratories contributes to the economy and progress of the country. Frequently this constant search for new knowledge to improve communications brings forth

discoveries of great value to other industries and the whole field of technology.

For telephone users, the Transistor has made possible advances that would have been impossible a brief decade ago.

In the years to come it will bring many new ways to make telephone service more convenient and useful to more and more people.

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#### READERS REPORT

#### New Tax Plan

Dear Sir:

I agree with Vice-Pres. Nixon [BW-Sep.13'58,p38] that "if we wait for needed tax reform until we believe we can afford a tax cut, our economy will have been denied vitally needed stimuli for growth." However, I do not believe that his tax reform suggestions go far enough for the stimulation that is needed for growth.

Since the growth of the economy will depend ultimately on growth companies and since it is these growing concerns who are the ones that need the additional ploughback from earnings, wouldn't it be a greater stimulus to the economy to tailor any tax reform to the needs of growth companies. I am thinking specifically of the plan which would exclude from a corporation's taxable income that portion of its pretax earnings in excess of the earnings for any previous year.

This plan would give the incentive to the companies that will be able to do the most good for the economy. In comparison, an across the board reduction in tax rates would just tend to subsidize inefficient firms at the expense of growing ones and an increase in allowable depreciation would only encourage tax-free speculation in capital facilities without necessarily improving the productivity of the economy as a whole.

On the other hand, hundreds of thousands of individual businesses working to increase their pretax earnings by increasing productivity and developing new products would have the cumulative effect of raising the economy to unbelievable heights.

D. S. MOFFITT

VICE-PRESIDENT

THE CONNECTICUT HARD RUBBER CO. NEW HAVEN, CONN.

#### Strings Attached

Dear Sir:

Who in Hell cares if Federal Highway Administrator Bert Tallamy and his staff are against "Buy American" clauses in federal highway building contracts?-Washington Outlook [Sep.27'58,p55].

Is this not just another poignant example of what happens when a state accepts federal aid, and further proof that each such grant "has strings attached" which are

## No more drudgery for me in cleaning grease-caked floors



#### His boss is happy too ...

and should be. Now an Industrial Dry-Scrubber, Finnell's 84XR, does the job in about one-tenth the man-hour time required to hand-scrape the floors! And of course the machine is far more thorough, and spares maintenance men the back-breaking effort of manual methods. Equipped with two powerful scarifying brushes, the 84XR digs through and quickly loosens even the most stubborn coatings of dirt, oil, grease, and shavings. Universal couplings enable the brushes to clean recessed areas that rigid coupling brushes would pass over and miss.

A flip of the switch re-sherpens brushes outomatically! Reversible motor keeps wires sharp. A flip of the switch reverses the rotation of the brushes and re-sharpens them automatically ... while working! Eliminates the need for frequent changing of brushes by hand in order to maintain a sharp cutting edge. Reversal of brush rotation also helps keep the brushes functioning efficiently by ejecting sticky substances that would otherwise clog and slow up the cleaning process. Total brush spread of the 84XR is 22 inches. Low, compact design permits cleaning right up to and beneath machinery—areas where deposits are heaviest. Interchangeable rings and brushes adapt the machine to wet-scrubbing, polishing, and steel-wooling.

Clean floors allow industrial trucks to move swiftly, surely and, according to actual tests, with half the pull it takes to move loads over dirty floors. In addition, clean floors aid safety underfoot and contribute to worker productivity. So it pays to keep floors clean — especially with a labor-saving 84XR! (The Vac illustrated, Finnell's 10C, features a 1½ hp, 115v AC-DC By-Pass Motor. Tank holds 12 gallons wet, 1¼ bushels dry.)



For demonstration, consultation, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 5810 East St., Elkhart, Ind. Branch Offices in all principal cities of the United States and Canada.

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ROBERT W. STEWART

ASSISTANT MANAGER
ODESSA CHAMBER OF COMMERCE
ODESSA, TEX.

#### **Another Viewpoint**

Dear Sir

Juvenile Insurance [BW—Sep. 13'58,p109] covers the insurance salesman's pitch fairly well, but here's how it looks from the other end: 1. Because of selling and administrative expense, plus actuarial risk, no insurance can be a good investment in the way a bank account or MIP is. 2. Therefore no coverage should be bought for any loss the insured could afford to absorb. (The absorbable amount should become the "deductible" on the policy)....

P. S. BARROWS

DEL MAR, CALIF.

#### Slode vs. Slud

Dear Sir

I was delighted to see the little discussion of the conjugation of "slide" in your Readers Report [BW—Sep.27'58,p5]. Let me add another form which, unfortunately, has fallen into disuse. In the Berners translation of Froissart's Chronicles . . . occurs the sentence . . .

"The same morning there had fallen a great dew, so that the ground was somewhat moist, and so in his going forward he *slode* and fell down. . . ."

This is not far removed in spirit

from . . . "slud". . . . .

JEAN H. VANDENBERG
PASADENA, CALIF.

#### Wrong City

Dear Sir:

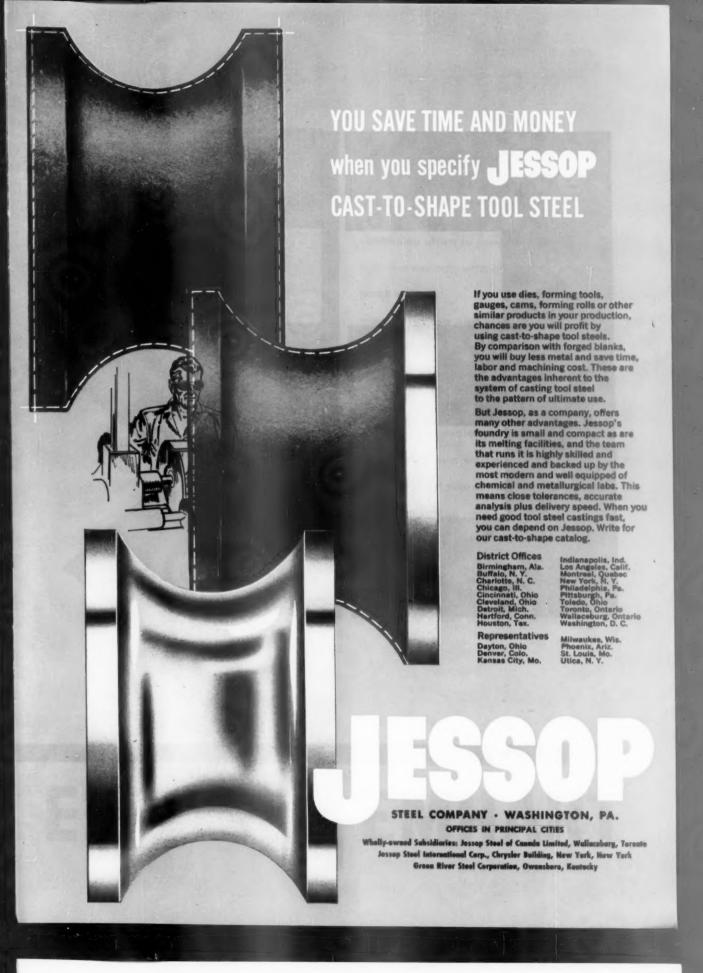
For many years I have been an enthusiastic reader of BUSINESS WEEK and a great admirer of the accuracy of your reporting.

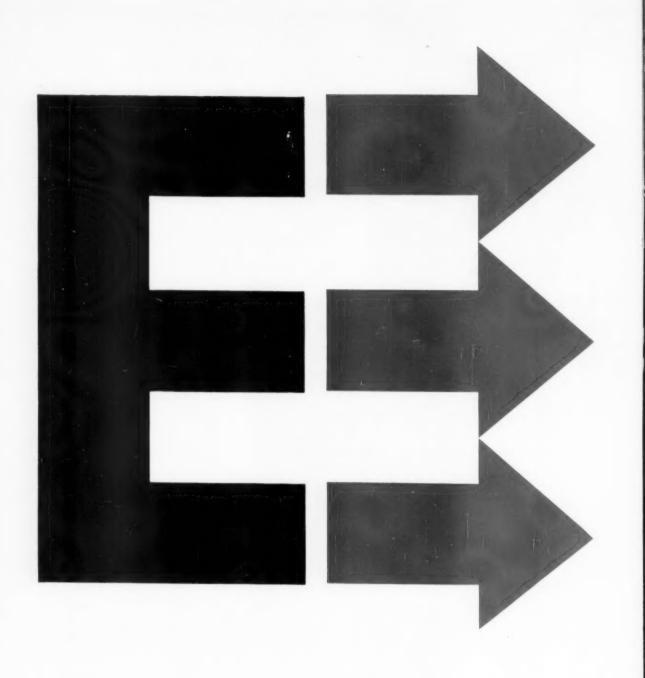
However, . . . the page outlining Labor News, [BW—Sep.20'58, p137] discusses the national convention of the Oil, Chemical and Atomic Workers and indicates that said convention will be held in "Long Branch, California." I hasten to take this opportunity of advising you this conference is slated for Long Beach, Calif., one of the nation's outstanding convention and conference cities. . . .

HOWARD JONES

MANAGER LONG BEACH CONVENTION & VISITORS BUREAU

LONG BEACH, CALIF.





E, the first letter in EFFICIENCY, is now (as shown) the symbol of EMHART and its products. It also signifies a continuing effort to provide industry with increasingly efficient equipment for packaging, metal forming and stamping, glass container manufacturing, plastics sheet forming, working aloft - indoors and outdoors, noise suppression, and converting sea water into fresh. The Emhart E represents: Standard-Knapp packaging machines V & O power presses and feeds Hartford-Empire glass-making equipment Maxim silencers

Maxim sea water distillation units.

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## INTERNATIONAL TRUCKS



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school bus chassis for every need.



Six-passenger pickup - the Travelett



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Roomy, rugged, easy to handle.



Multi-Million-Mile diesels.



Extra-rugged off-highway models



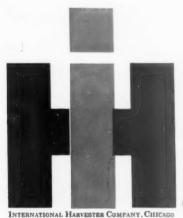
Here are seventeen trucks that illustrate one idea:

International offers the world's most complete line.

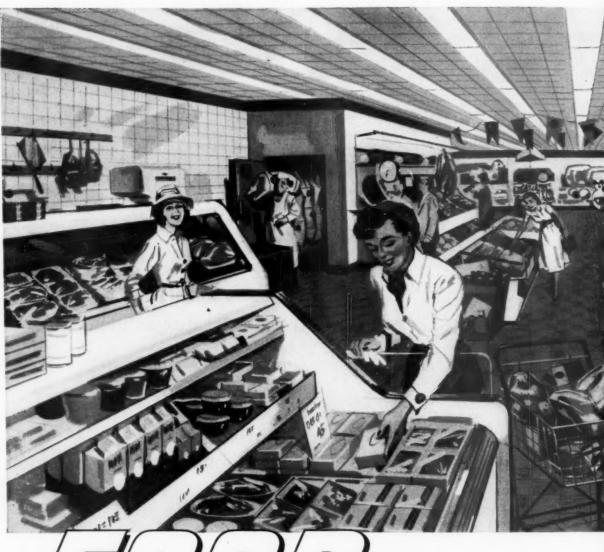
Look them over. There's an International Truck for *your* job.

And there's not a truck built that can do it better.

cost least to own!



INTERNATIONAL HARVESTER COMPANY, CHICAGO
Motor Trucks • Crawler Tractors
Construction Equipment • McCormick®
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# 500 BUSINESS

...AND IT GROWS, SHOWS,



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Hundreds of BAKELITE Brand Plastic products help grow,



Everywhere in this modern supermarket there are products and packages based on BAKELITE Brand Plastics.

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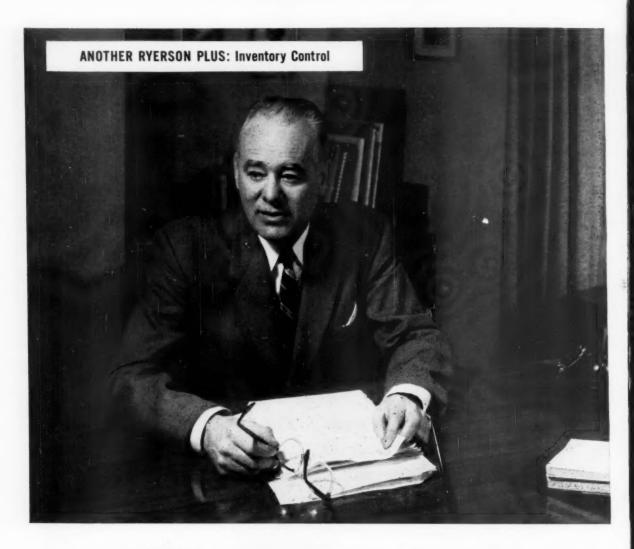
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### **BUSINESS OUTLOOK**

BUSINESS WEEK OCT. 18, 1958



Official readings of the recovery are coming out fine—even though some of the figures might look better if autos could be left out.

- · Personal income and gross national product are progressing well.
- Factory employment's gain, May to September, is the best in years.
- · Retail sales are setting records in most categories except autos.
- · Housing starts have edged forward to another recovery high.
- · Production has stuttered, all because of troubles in Detroit.

Improvement in non-automotive sectors once again stresses the burden of proof that is being placed on the new cars. And there won't be a final answer for several weeks, maybe months.

Automobile manufacturers haven't even been able to stock dealers adequately for unveilings, much less for a real test on sales.

General Motors, at midweek, still hadn't been able to get back into production. (Chevrolet had turned out not even 3½ cars per dealer, on the average, before the strike.) As this week started, Chrysler began to run on an uninterrupted basis for the first time. And Ford last week was just beginning to work up to fair volume on its new cars.

Difficulties in the auto plants are having repercussions, of course, a long way from the production lines. A. O. Smith Corp. scheduled layoffs totaling 2,700 in two auto-frame plants by weekend.

Government analysts, judging the economy in terms of dollar turnover, are convinced it will reach record size around the turn of the year.

They figure the value of all goods produced and services rendered reached about \$440-billion in the third quarter (up from an estimated \$429-billion at an annual rate in the second). And they look for a gross national product of \$450-billion late this year or early next.

The old high was just under \$446-billion in 1957's third quarter.

Personal income—whose relative stability is getting so much credit for stemming the recession—is continuing the gains that began in April.

The September total figures out at an annual rate of \$357.5-billion.

That's up roughly \$11-billion from the low. What's more, wage and salary payments now are contributing a full share to the gains as employment rises, the work week lengthens, and hourly pay rates increase.

Improvement in personal income, for a time last spring, rested a little too heavily on government payments to the unemployed and the elderly to give the situation a look of really glowing health. But wage and salary disbursements began to turn up in May.

Since that time, payrolls have been doing very well indeed. September's \$239.1-billion is \$7-billion above the low.

Much of the rise in payrolls may be traced directly to the improved situation in manufacturing employment.

#### BUSINESS OUTLOOK (Continued)

BUSINESS WEEK OCT. 18, 1958 Factories have added more than 650,000 workers in four months.

The only recent year to come close to that was 1955, and the average for the last five years has been hardly half this year's gain. The present total of 15.7-million factory hands, nevertheless, is about 1.2-million below this time last year and 1½-million under the 1956 top.

Employment in all kinds of work still lags a year ago by just over 1-million (page 154). However, nonfarm jobs have narrowed their gap to 700,000 against 1.2-million six months ago.

Allow for the year-to-year gain of 515,000 in the labor force, and you see why unemployment remains relatively high.

A jobless total of 4.1-million in September looks a good deal better than the 5.4-million in June, but is 1½-million above a year ago.

Those who hold jobs at least are getting about as much work each week as last year at this time, while pay envelopes go on fattening.

The work week in manufacturing last month averaged 39.8 hours against 39.9 in September last year (and up from 38.3 in April). At the same time, average weekly earnings have risen above \$85 for a new record. The previous peak was \$84 in December, 1956, while the recession low was recorded last January at \$81.06.

Production in September wasn't quite so high as had generally been expected, mainly because of the labor tangle in Detroit.

The Federal Reserve Board's seasonally adjusted index stands at 137 (the same as August's preliminary level), while the previous month's figure has been pulled down a point to 136.

Generally speaking, metalworking industries haven't been advancing as fast as originally calculated. There has been a slight slowdown in machinery along with the sub-par output of autos.

The softgoods side of the economy continues its upswing. The Federal Reserve measures such output at 134 for September, a 1958 high and 2 points better even than at the highest level last year.

Retail sales continued to show much the same characteristics that they have been developing through the summer:

Exceedingly low volume in autos and automotive products, an improving rate in other hardgoods, apparel about on a par with last year, record food sales, and a widening gain for general merchandise.

Housing starts were the highest for the year to date in September, to the surprise of no one who has been following the contract lettings. Last month reached a seasonally adjusted annual rate of 1,220,000.

Both July and August had been just a little below 1.2-million. Some fears already are being expressed, however, about how long present activity can be maintained. The interest rate on Veterans Administration loans already is unattractive to lenders in many areas.

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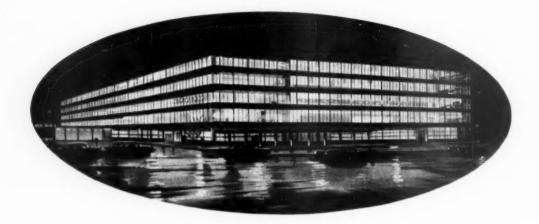
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## Dodging the Inflationary Threat

■ The Federal Reserve and Treasury now see hope of financing huge federal deficit without fanning an inflationary blowoff or crippling recovery.

They find good signs in better corporate cash positions, rising tax receipts, stable consumer prices.

It will be tricky, but once the public is convinced inflation can be halted, officials will stand a better chance.

Officials of the Treasury and the Federal Reserve this week thought they could see some hope for a solution of the knotty problem with which they are grappling. Signs began to appear that the projected \$12.2-billion federal deficit for 1958-59 can be financed without fanning a possible inflationary blowoff that would endanger the present economic recovery.

Though it is still too early to be certain that the deficit can be financed without inflation, officials were pointing to a number of new developments:

 Corporations have improved their cash positions to the extent that they are not borrowing heavily at the banks but are able to buy short-term Treasury issues. This cuts down on inflationary bank purchases of these issues.

• The improvement in business activity promises to increase tax receipts faster than the Treasury had estimated. This would reduce the deficit.

• The consumer price level seems to be due for short-run stability, regardless of what is coming in the long run. This will help to calm fears of inflation, and the Fed and Treasury are sure that this in turn will restore confidence in bonds.

• Only Cloud—Washington has no doubts about the strength and vigor of the economic upturn. The sharp drop in unemployment and the continued climb in personal income are just two of the bullish signs. Though the recovery may slow, Administration economists are convinced the momentum will carry the economy to new peaks over the next six to nine months.

The Federal Reserve index of industrial production for September, released this week, was at 137, only slightly above the August figure (which had been

revised downward by one point). The sluggishness, officials explain, was largely due to the auto situation, where the new-model changeover has been slow in getting started. They are confident that October will show more bounce, and that by the end of 1958 the index will be nudging its all-time high of 147.

The only cloud that keeps officials from enjoying this upturn is the threat of inflation arising from the Treasury's impending deficit. It's not just government spending as such that causes the concern. What causes the worry is that the Treasury may have to raise the money it needs in the most inflationary of all ways, and in doing so may start a price rise that could produce future instability.

#### I. Dilemma

Here's the problem. Ordinarily, the Treasury could expect to raise much of the new cash it needs from institutional investors seeking the safety of fixed income securities. But fixed income securities, especially government bonds, have become anything but safe. This summer, the government market suffered the sharpest price drop in modern times, and investors fear a repeat.

With the money market so unreceptive and unsettled, the Treasury has to sell short-term obligations to the banking system. This means the Fed will have to furnish reserves to the bankand that process can lead to an inflationary expansion in the money supply.

• Fed's Position—The Fed acknowledges that "the Treasury will be financed," but it does not want a huge expansion in the money supply. That, it says, would tax the nation's productive capacity, and insure price rises.

If inflation is to be stopped, the Fed

feels, it cannot provide funds to all comers. So if the Treasury takes its huge bite, less will be available for corporations, housing, and state and local governments. And with less money available, its cost will rise.

That, in turn, could conceivably put a brake on the recovery. The Fed believes, however, that as money rates rise, more real savings will become available. Many economists disagree, but the Fed argues that, in any case, most potential borrowers are unlikely to be put off by higher rates. One high Fed official speculated that top corporations may have to pay up to 6% for long-term funds to attract lenders.

#### II. Rising Hope

If all the breaks should go against the money managers, the situation might get out of control. The Fed might then find itself crippling business with high interest rates at the same time that it was feeding inflation with new money in an effort to satisfy the Treasury's needs.

But both the Fed and the Treasury think that the breaks are not going to go against them. They now hope to avoid both horns of the dilemma. They hope that interest rates can be kept "reasonable." And they hope that fear of inflation will subside enough to get a market for longer-term Treasury securities operating again. Said one official: "If the public is convinced that prices will remain stable for the next six months or so, they may lose their fear of inflation, and that by itself will help us prevent it."

• Rising Revenues—There's also the hope that the deficit itself will shrink. While there is little chance of cutting back spending, many officials are convinced that current estimates of revenues are "conservative." As the economy moves up, profits improve, and the tax take increases. Some officials even see the possibility that the deficit may be pared by \$2 billion or \$3 billion.

may be pared by \$2-billion or \$3-billion.

"That would leave us still deep in the red," explained one official, "but it would be a better performance than most people now expect. And as investors always try to anticipate the future, the probability is they will realize that a much smaller deficit is likely in the next fiscal year. This realization

should make them even less inflationary

in their thinking.

One of the things that may swing the balance in the public's thinking is the consumer price index. And here officials see another glimmer of hope. They think that the so-called cost-ofliving index will show little change for the next few months-partly because of statistical peculiarities but more im-portantly because the upward trend that continued throughout the recession finally seems to have spent itself.

With the cost of living stable, the money managers hope that a "more sober climate" will develop in the financial community. "If we could convince investors that inflation was not inevitable," says one Treasury man, "we could be on the road to licking infla-

· Non-Inflationary-The fear of inflation is abating in Washington itself. So far, at least, the Treasury's financing operations have not forced the Fed to make more reserves available. The Fed provided the banks with increased reserves during the first six months of the year, in its easy credit policy then aimed at cushioning the business decline. The banks are using these reserves to buy short-term Treasury issues.

The Fed points out that the banks have been able to accommodate the Treasury to date primarily because demand for bank credit by corporations has been surprisingly modest consider-

ing the recovery in business.

· Corporate Funds-Fed officials feel the improvement in corporation cash positions is the result of drastic inventory reductions and other economizing measures earlier in the year. Widening profit margins also add to liquidity.

Both the Treasury and Fed are hoping corporations will use part of their cash to buy short-term government securities. With the rapid turnaround in profits, corporations are building up tax liabilities; but there is considerable lag before tax payments are due. The Treasury hopes corporations will put money into government obligations maturing around tax dates.

This would be a big boon to the Treasury-and the economy. It would serve to hold down the amount of reserves the Fed must provide the banks -and thus limit the expansion of the money supply. And it would give the Treasury some breathing space, and an opportunity to sell some obligations to

non-bank investors.

• Long-Term Impasse-At there is little hope of a successful reception of a long-term issue, even at attractive rates. Both banks and institutional investors have experienced huge losses in governments, and blame the Fed's "hands-off" policy.

The Fed is conscious of this criticism. Its officials feel it would be a mis-

take to support Treasury issues, but they also recognize that a viable long-term market is absolutely essential to avoid

inflation in the years ahead.

· Switch-This is the explanation for the Fed's latest use of "open mouth" policy (BW-Oct.11'58,p58). Fed officials now say that interest rates have soared to a height "disproportionate to the economic situation and the over-all demand for credit." Without forecast-ing future moves, they also maintain that present policy is "neutral" rather than tightening.

This switch in emphasis has had a

rallying effect on the bond market. But investors aren't sure this is anything but temporary. They want some assurance that the fight against inflation will be waged on a broad front, not just through monetary controls.

• Psychology—The real danger, sums up one official, is in public psychology. As he puts it, "if the public thinks inflation can't be stopped, we are likely to have a bubble that will blow up the recovery. But if we can convince them that inflation can be stopped, we are in a much better position than we were in the last boom.

## First Shot in Rail Rate Fight

The B&O has launched what could be pitched battle between rails and trucks over freight rates. The issue: extending "piggyback"-type bargain rates to other railroad freight.

The opening salvo has been fired in a skirmish that might flare into an allout freight rate war between the nation's

railroads and truck lines.

The immediate issue is a Baltimore & Ohio RR proposal before the Interstate Commerce Commission to charge a bargain rate for freight shipped in ordinary boxcars, competitive with the 'piggyback" rates for cargoes moving in trailers mounted on railroad flatcars. If the B&O wins permission to extend "piggyback"-type rates to boxcar freight, and if other railroads did the same, it could mean a drastic change in the way rail freight rates are computed-and a severe threat to the truckers.

Historically, the rails have pegged their rates mainly to the value of the commodity to be transported. Recently, they have been shifting little by little to the volume and weight of the shipment-regardless of what it is-as their rate basis. Of course, for years they have maintained carload volume rates for shipments of at least about 30,000 lb. But, with some exceptions, the carload rate has been as low as the ICC would allow-and especially in the case of high-value goods the carload rate was usually high enough to give the trucks a

competitive edge.

• "Piggyback" Arrives—Since the advent of "piggyback," the railroads have been allowed to charge a flat fee for hauling freight in truck-trailers on flatcars, whatever was inside the trailers. This summer, the ICC allowed them to go still farther-to offer a volume rate for shipments of 70,000 lb., equivalent to the load of two boxcars, in a pair of truck-trailers on a single flat-

The B&O, however, can't haul standard-size trailers because of insufficient overhead clearance along its lines,

and it doesn't own suitable flatcars. So, it wants to offer the same 70,000-lb. volume rate for hauling a single lot of mixed freight-with no one commodity accounting for more than 60% of the total weight-in two boxcars loaded to-

• The Figures-For the first 70,000 lb., the shipper would pay only 64.5¢ per 100 lb. for the New York-Chicago run -compared with the \$2.02 carload rate now charged on a 30,000-lb. minimum. For freight in excess of 70,000 lb. in the same shipment, the rate would be 60¢ per 100 lb.

The volume-basis rate is particularly favorable to freight forwarders, who can lump several smallish shipments into one big movement and thus win the benefits of the lower charge (page 86). Big shippers, of course, also profit.

The B&O was first to apply for volume rates on two-boxear shipments. However, the New Haven has filed a similar proposal; other roads will probably follow if the ICC approves.

· Truckers Shriek-The ICC has suspended the new B&O rate until Mar. 14, 1959, in response to a wail of protest from the truckers. This week, the truck lines-through the Eastern Central Motor Carriers Assn.-screamed again to the ICC in a complaint aimed at 22 railroads and an equal number of freight forwarders. The association wants ICC to probe deeply into all volume rates and abolish most of them, lest the trucks lose cargo. They can't compete on a tonnage basis.

The rails, for their part, think they have the newly passed Transportation Act of 1958 on their side. If volume rates can give them a profit, they could claim they should be allowed to use them even if it hurts another form of

transportation.



GENERAL MOTORS' new management team Pres. Gordon (left) and Chmn. Donner think this year will bring upswing,

## GM Parades Its 1959 Line-Up

This week General Motors Corp. formally displayed for inspection (1) its new line of cars for the 1959 model year, and (2) its new top management team—chairman and chief executive officer Frederic G. Donner and Pres. John F. Gordon.

The initial reaction in both cases: favorable, with the real test to come in what looms as another hotly competitive auto year.

• On Parade—At its first Motorama spectacular since 1956 at New York's Waldorf-Astoria, GM displayed its line of Cadillacs, Buicks, Oldsmobiles, Pontiacs, and Chevrolets—for the first time in its history, according to Alfred P. Sloan, Jr., honorary chairman, with "everything completely new."

For a whole week, the public had a chance to inspect the cars in

the hotel's Park Avenue showrooms.

Actually, there were no big surprises either in the cars or in what the corporation's chief officers had to say. Yet, in effect, the occasion launched what many believe is a crucial year in the auto industry's history. From every economic angle—a rising level of business, a consumer market that should be ripe for an industry that has had two rather disappointing years—this should be the time for a resurgence in new car sales.

Note of Caution—Despite the optimism that both Donner and Gordon displayed, as a team they sounded a note of caution:

• They agreed, but only when queried by the press, that ex-Pres. Harlow Curtice's estimate of domestic sales of 5.5-million cars in 1959 is still "a very good figure." Donner said



MOTORAMA at New York's Waldorf-Astoria drew a host of business leaders.

"Compared to this year, it would be a

very satisfactory figure.'

· They defended the recent-but still not fully ratified-labor agreement with Walter Reuther's United Auto Workers as noninflationary, "a reasonable and fair settlement."

· They argued that the annual model change, which has come increasingly under attack as uneconomic, "has enabled the American automobile industry to make its great contribution to the way we move and live in this

· They admitted that the corporation was fairly well along in its consideration of a small American car to compete with foreign makes. But, cautioned Gordon, "we have not vet reached the point of no return."

· Economic Growth-On practically no score was GM's new management sticking out its neck. In early 1954, when GM staged its first New York Motorama, its then president, Harlow Curtice, announced with fanfare that during the next two years GM would spend \$1-billion for capital investment.

At that time, Alfred Sloan said the figure might hit \$1.5-billion. This week, however, it became pretty obvious that the policy is not to climb too far out on the limb in predicting either

sales or expansion.

Donner, long a financial expert for GM, did make a strong plea for a philosophy of economic growth-in business, labor, and government. He told a luncheon meeting of the bluebloods of American business management: "There is, I am convinced, a need for our government officials to take calculated risks and, in times of doubt about the direction of economic trends, to give the benefit of the doubt to policies which encourage investment , so that a high level of output of goods and services will be assured. At no time has this need been greater than it is today.

· No Real Test-Throughout the proceedings, it was obvious that GM and the industry generally were hoping for a response similar to that which greeted the introduction of the 1955 models. Then, as one spokesman said, "everybody seems car crazy, and we're glad of it!

So far there has been little real test of the market. Buick, first of the new cars to hit the road, claims the best introductory period in its history. Un-

GM empire have held up deliveries. · New Team-Sloan, credited with being GM's organizing genius, won a standing ovation as he introduced the company's new management to the business leaders' luncheon. The retiring management, Harlow Curtice and Albert Bradley, along with former Pres. Charles E. Wilson, also were acclaimed

fortunately, local strikes throughout the

by both Sloan and the guests for their contributions.

All in all, the atmosphere was one of transition. Sloan described 1958 as "an unusual year," one in which GM reached maturity at its 50th anniversary. "The next 50 years will be a lot bigger and better," he added. In describing the management

change made Sept. 1 (BW-Aug.30'58, p18), he said the chairman and financial man becomes the chief executive officer, relieving the chief operations officer of vast problems. This, he said, assures GM of "an acceleration of engineering concepts and improving coordination to achieve higher quality at

#### Better Break for Subcontractors

That's main aim of new Air Force "make-or-buy" rules for defense contractors on jobs of \$350,000 or more.

A fairer shake for subcontractors in defense work is the basic aim of a new regulation that Air Force contractors are due to get soon, on handling of "make-or-buy" items in contracts totaling \$350,000 or more.

By pushing hard for work to be subcontracted, the Air Force aims to prevent the creation of big complexes of government-owned facilities for prime

But the new regulations are tempered down considerably from the originally proposed regulations-Air Force procurement instructions 53-101-that were circulated among the industry about 18 months ago.

When contracts are first written, a general agreement is made on which items the prime contractor is to subcontract. The original proposals would have bound contractors to this initial "make-or-buy" list unless the Air Force gave advance approval for changes.

Now, the service will allow the prime contractor to change its list by giving 'prior notice" a change is being madethough the Air Force, if it disagrees with the contractor's increase of inplant work, can use all available means of "persuasion," withholding use of government facilities as a last resort.

The regulation has also been revised to meet other industry objections. Prime contractors, for example, need not spell out a detailed list of makeor-buy items in a contract, but can stick to a relatively small number of critical or major components, assemblies, and subsystems.

· Air Force Beefs-Behind the new regulation is the fact that in the shift from airplanes to missiles, prime contractors have been handling more and more work previously farmed out to

subcontractors.

The Air Force claims that contractors using rent-free, governmentowned facilities often have a cost advantage over subcontractors-and indirectly, an edge over other contractors, in cases where the government has put up capital to expand regular production, leaving the contractor's private capital free for expansion into new areas.

If the Air Force has its way, prime contractors using government facilities who find themselves with extra capacity won't be allowed to pull in subcontract work just to keep the plant busy.

If an item is normally subcontracted, the Air Force wants to keep it on that basis-and intends to put on "real management pressure" to do that.

· Whittling-Air Force officials are also whittling away at the problem of big complexes of government-owned facilities. Such big installations as the Douglas B-47 plant at Tulsa, Boeing's Wichita plant, and others have come back to haunt them. Admittedly vital to the nation at one time, such facilities

now present problems.
"Once they are up," says one spokesman, "pressure is put on the government to keep them busy." This brings politics into areas that the Air Force would like to keep free from such

· Not Final-The new regulation, however, is not vet final. The latest draft has been presented to an aircraft industry committee, but industry officials are still seeking changes in language. A subcommittee is collecting contractor comments, and will meet with Air Force officials on Oct. 24.

That will likely be the final meeting. Air Force sources indicate that though industry recommendations will be considered, the regulation will probably stand pretty much as now written. It is expected to be published and distributed in November, and to become ef-

fective immediately.

· Procedure-Under the present plan, prospective bidders for contracts over \$350,000, which have cost-reimbursement or incentive provisions, or which will involve the use of government facilities, will submit a proposed make-or-

buy list with the bid. The Air Force has dropped a draft

provision requiring contractors to give notice when a production item is transferred between "divisions" of a company as subcontractors. Industry claimed this was unduly restrictivewhat one company labeled a division, another might call a department.



## Shuffle in Bank Districts?

The Federal Reserve is taking a quiet look at its system of 12 district banks and 24 branches to see if a change of district boundaries would improve banking services or make its task of money management any easier. The map above shows one of the schemes it is considering, though not necessarily the one that will win out.

The study began after Alaska was added as a state this year. Members of Congress from Washington and Oregon immediately began a drive to establish a new Federal Reserve district to include Alaska, with Seattle as headquarters. Seattle is now a branch of the sprawling 12th District, centering in San Francisco.

For years, complaints about the existing district boundaries have been made by economists, regional promoters, businessmen, and occasionally by bankers. These complaints are now being re-examined with the idea of either rejecting them once and for all or of changing some of the boundaries that no longer make any particular sense

· Grab Bags-One of the major complaints is that Reserve district boundaries often do not follow state lines, making it impossible to match state and district statistics about trade and banking. The 7th (Chicago) District, for example, is usually thought of as consisting of five states. Actually, only Iowa is wholly within the district; parts of Illinois, Indiana, Wisconsin, and Michigan lie in other districts.

Another criticism is that many of the districts no longer meet a requirement

of Congress that they be, as nearly as possible, homogeneous economic areas.

Again the Chicago district is cited. When the boundaries were established 44 years ago with the founding of the Federal Reserve, the 7th District was chiefly agricultural. That's why Iowa was included. But the great steel complex around the southern tip of Lake Michigan and the automobile industry in Michigan now give the area a predominantly industrial tone. Iowa, the argument goes, should by all the rules of economic logic now be attached to the 9th (Minneapolis) District.

Another district often criticized as an economic monstrosity is the 10th, for which Kansas City-on the district's extreme eastern edge-is the reserve city. There's talk in Colorado of making Denver the headquarters of an additional district, throwing in Utah and Idaho from the 12th, Montana from the 9th, and Colorado, New Mexico, and Wyoming from the 10th (map). This would be an area characterized by a range livestock economy,

· The Northwest-Of all the suggested changes, the creation of a new district in the Northwest to include Alaska probably has the best chance. For one thing, Washington, Oregon, and Idaho just missed becoming a separate district when the lines were originally drawn.

Sens. Warren G. Magnuson and Henry M. Jackson of Washington filed a bill creating the Seattle district in the last session of Congress, and they intend to throw the fight into high gear next session. They will probably

have the support of senators and representatives from the three Northwest states, as well as the newly elected lawmakers from Alaska. The new district would require Congressional approval.

· Changes in Past-The Federal Reserve Board of Governors has traditionally resisted suggestions for new districts or redrawing of boundaries, though a few minor changes have been made over the years.

After considerable local political pressure, 25 counties originally assigned to the 9th (Minneapolis) District were shifted to the Chicago district by an action of the board. Two New Mexico counties were transferred from the 11th (Dallas) District to the 10th (Kansas City). During the depression, when Federal Reserve funds were scarce, a branch at Spokane was dropped. Moves of this kind can be made without Congressional approval.

· Influence on Choice-There are several reasons for the board's coolness to

major changes:

· To the argument that some of the districts-particularly in the West and Midwest-are no longer homogeneous areas, officials merely say: "They never were." The districts were put together by a combination of tradition and political pressure,

· In the view of Federal Reserve economists, the failure of district and state statistics to coincide is a nuisance but not a major problem. "There's less and less call for regional statistics," one official argues. "The demand now is for either national or city figures, and these aren't hurt by the present system."

• The whole concept of a district Federal Reserve system lost ground as the influence of Washington in monetary policies rose over the past quarter of a century. The Board of Governors, and particularly the chairman of the board, is much more powerful today than the founders of the system fore-

· Fewer, Not More-If the boundaries could be redrawn on a strictly rational basis, the Board of Governors would quite likely recommend fewer districts not more. Airplane transportation has practically wiped out the problem of quick check collections, for instancea major housekeeping function of the system and an important factor in locating the Reserve cities and branches 44 years ago. Needs could now be met with fewer reserve banks.

In addition, member banks in one district are allowed to send checks for collection directly to banks of another district without going through their own Reserve or branch bank.

"This practice reduces the district boundaries to something of a fiction, so far as practical banking needs are concerned," one official admits.

## Sidewalk Supers Find They Sign Leases

University Properties, Inc., which is creeting a 22-story office building (right) on a downtown property of the University of Washington, has found a way to cash in on the old sidewalk superintendents' club.

In Seattle, one of the problems in renting is the code of ethics of building management that prohibits soliciting of tenants in another building. If you want to interest a tenant in say the Jones Building, you have to have the

tenant come to you first.

Somewhat by accident, the building management for this new structure discovered that a plush sample office attached to a comfortable sidewalk superintendents' quarters brings in men from nearby buildings. Some of them say, "I'd like to have you come over to talk to me about this."

· De Luxe-The sidewalk supers' gallery is glassed in, heated, has a bank of old theater seats, a vinyl tile floor, and a coffee bar. The bar, handled by Clarks' Restaurant-a tenant in other buildings of University Propertiesserves doughnuts made on the spot, hotdogs, cold drinks. It's called the "Half Minute Chef"-a takeoff on its big restaurant, the Minute Chef. To attract the right prospects, the building management is sending out passes, good

for free food and drinks at the food bar anytime during construction. This exclusive note discourages the usual sidewalk hangers-on.

The entire setup is called the Skyline Theatre. The entranceway has a pillar of Georgia marble, the material the building will be finished in. The model office is complete with desk, chairs, wall-to-wall carpeting, and the decorator's touch. A slide viewer shows the finished building and details of office

arrangements

· Early Results-The mockup office and theater have been open only about two weeks, but the building management is enthusiastic. As a direct result, Jack L. Dierdorff, rental manager, claims that he already has had one inquiry for a half-floor. Dierdorff says that for likely prospects, the management prepares blueprints showing the exact layout. But the men who make the decisions want to visualize what the blueprint shows. That's where the mockup comes in.

The building, scheduled for occupancy Jan. 1, 1960, will have about 223,000 sq. ft. of rental space. According to Dierdorff, inquiries have been made for 300,000 sq. ft., and management is "in active negotiation" for

200,000 sq. ft.



SIDEWALK SUPERS become prospective





MOCKUP office draws businessmen, who drop in on their way to lunch at the nearby Athletic Club or Olympic Hotel.

SKYLINE THEATER housing "Half Minute Chef" food bar and a decorated sampling of offices doubles as renting office.



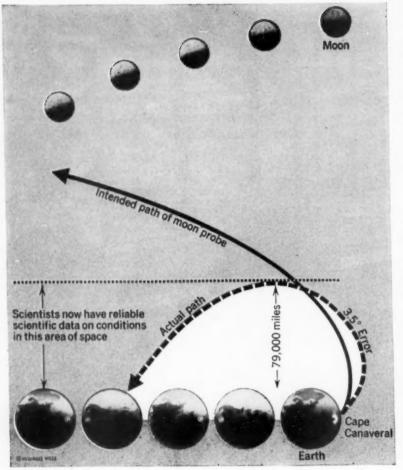
tenants as they sip free coffee, watch construction of new building from glass-enclosed gallery, and inspect mockup of offices.



SALES pitch to Dean Witter & Co. for fourth-floor location is a drive-in entrance straddling the top of parking facilities.



DEAL is clinched and architect Robert Nasser (right) plans arrangement of stockbroker's offices in new building.



## Moon Shot Misses Goal But Gives Hope a Lift

A near miss usually scores points only in the game of horseshoes, but the near miss in last weekend's moon shot by the Air Force is being hailed as almost equal to complete success.

Pioneer came close enough to its goal—an orbit around the moon—to assure scientists that manned space flight will be technically feasible in the very near future. Causes of the narrow failure have been identified and are remediable. The Thor, one of the two U.S. intermediate-range ballistic missiles, proved itself. And so did U.S. rocket technicians, whose morale has been badly battered by Russian Sputnik successes.

 What Went Wrong—Rocket experts at Cape Canaveral learned much and found much comfort in Pioneer's brief life. The three rocket stages that carried the lunar probe up to a record height fired perfectly, despite a mingling of solid-fuel and liquid-fuel units. And although the fourth-stage retrorocket (which was to slow Pioneer enough to orbit in the moon's feeble gravitational field) never got to fire, there's every indication that it, too, would have performed on schedule.

Pioneer's instruments also collected data as planned: the amount of particle radiation at various altitudes, the strength of the earth's magnetic field, temperatures inside and outside the vehicle, and the characteristics of radio signals.

Moments after Pioneer blasted into the night sky, men at their instruments detected the slight deviation of course that doomed the lunar probe to a meteoric death in the Pacific southwest of Hawaii. Soon they pinned down what had gone wrong. Thor's own guidance system had been deemed too heavy and had been replaced by a small autopilot, in which a gyroscope had failed to function perfectly.

Thus, in its first few seconds, the rocket climbed 3.5 degrees too steeply. It wasted power fighting gravity while it was still in the earth's heavy atmosphere. This meant that, when the second and third stages burned out and dropped away, Pioneer wouldn't be going quite fast enough to escape the earth's gravity.

• How Close—The fact remains that Pioneer rose nearly 80,000 mi.—about one-third of the way to the moon, and 18 times as high as the previous altitude record for a U.S. research rocket. By only about 415 mph., it failed to go

all the way.

At the speeds of this flight, 415 mph. is a tiny difference. "Escape velocity" is 23,860 mph.—the speed it takes to break out of the earth's pull of gravity. Because of its power waste in climbing a shade too steeply, Pioneer reached a top speed of only 23,447 mph. before the third stage burned out. It had been planned to attain 24,015 mph.

• Step by Step—Pioneer was really the name of the lunar probe containing the payload. It was mounted on an assembly of rockets: the first-stage Thor, liquid-fueled, 150,000 lb. thrust; the second-stage unit from the Vanguard, also liquid-fueled; the third-stage made up of eight solid-fueled rockets, and the fourth-stage retro-rocket, also solid-fueled, that was to act as a brake.

All this gear was brought together in relative haste—the lunar shot wasn't authorized until last March, so the project had to depend mostly on hardware from the shelf. The armed services and other government agencies worked with a team of 52 contractors from

industry.

It still takes hours to get a big liquidfueled rocket ready to fly, but the Thor-Vanguard combination was prepared for the firing at 4:42 a.m. EDT on Saturday—right on the dot of schedule and without a hitch. This demonstrates, says a Pentagon spokesman, "the practicability of the countdown of big liquid rockets."

• In the Air—Thor's chambers burned out, as predicted, in exactly 160 sec. Then Vanguard took over for another 110 sec. By this time, the incorrect angle of fire had doomed Pioneer to fall short of escape velocity. However, everything else was still running right.

The third stage, made up of the eight vernier rockets (functioning more for trimming course than for thrust), fired as planned, spinning the vehicle at 200 rpm. to prevent drift. They compensated for error and pulled Pioneer back on heading for its rendezvous with the moon 2½ days later. But the damage had been done at the start. Coasting without power, Pioneer continued past 79,000 ft. altitude, slowed gradually to 1,100 mph., then yielded to the earth's pull.

Scientists would like to have tested the retro-rocket and its radio signal system, but the fire control was frozen. This again was the fault of Thor's navigation error—the device of heat-absorbent paint that was to have kept the inside of the "top" at 50F or more couldn't operate because the sun didn't strike at the right angle.

• Thor Proved—Next time—probably around Nov. 8, when the moon again comes 220,000 mi. from earth—Thor will very likely get another chance with its own navigational system, which can briefly be guided from the ground, or with another more reliable autopilot

arrangement.

Military men are pleased with Thor's performance. The missile goes into operational use in the hands of the troops in December; it now looks like a reliable weapon. Moreover, the moon shot not only shows Thor can travel 1,500 mi. from point to point on earth, it also suggests that, with modifications such as additional rockets, it can be made to travel accurately as much as 4,000 mi. This has more value in research than in military use (military men prefer to rely only on single-stage rockets), but it should expedite future experiments.

• Scientific Data—Before Pioneer gave up the ghost, it had telemetered valuable information back to earthbound

scientists.

Most important to future manned space probes, the earth-circling band of radiation appears less hazardous than had been expected. Reports from Pioneer's ion chamber indicate that the radiation band starts at about 600 mi. above earth, reaches a peak intensity of 4 roentgens per hour at 5,000 mi., then tapers to about 3 roentgens at 10,000 mi.

This means that, with minimum shielding, a man can safely pass through this zone, provided he does it quickly enough. According to current estimates, the safe limit for a man's health is about 50 roentgens in a short span of time (genetic damage can occur with a much smaller dose).

The force of the earth's magnetic field appears to be about as predicted. Temperatures seem to offer no insurmountable obstacle to space travel. Radio technicians see no problem in communicating with space ships by radio: Pioneer's radio signals stayed strong at 400 milliwatts right to the end.

Pioneer's apparatus to record hits by meteorite particles picked up and reported only two impacts, which leads scientists to think that the device wasn't working properly. But the fact that no major blow destroyed the rest of Pioneer's equipment indicated that micrometeorite activity out in space can't be as perilous as some scientists had feared.



## To Carry Man Into Space

North American Aviation, Inc., this week rolled out its X-15 rocket-powered research plane (picture), which may become the first craft to carry a man into space—depending on (1) how you define space and (2) what the Russians do in the meantime.

The X-15 operates far differently from conventional airplanes. It's a plane that flies like a ballistic missile, or a missile that has characteristics of a plane. In flight, it must follow a prescribed trajectory, like a missile rather than an ordinary plane. Yet it will land

like a glider.

• How Far in Space?—Whether or not the X-15 can be defined as a true space ship, it clearly aims at soaring above most of the earth's atmosphere. North American says it will fly faster than 3,600 mph. and climb at least 100 mi. above the earth; other observers say it will fly as fast as 4,500 mph. and reach a peak of 200 mi.—well above the low point of the satellites' elliptical orbits.

For its first flights, the X-15 will be carried by a B-52 bomber to a height of 40,000 ft. over Utah, then dropped. As it clears the bomber, the X-15 will kick in its liquid oxygen rockets and point at the sky. After burn-out and at the top of its trajectory, it will nose over like a missile and plunge to land 400 mi, away at Edwards Air Force Base in California. The first flight is scheduled for next January.

 Pilot Control—Once its course is set, as in a ballistic missile, control is limited to keeping the ship squared away within the original flight path while

the engines are still firing.

Because standard controls wouldn't work in the thin atmosphere, the X-15 is equipped with tiny vernier (fine adjustment) rockets in the nose, to correct for pitch and vaw, and in the wing-

tips, to correct for roll. The pilot will fire these rockets, which are fueled by hydrogen peroxide, to nudge the plane back into correct flying position.

The X-15 will land on two steel skids mounted well aft under the horizontal stabilizers; dual nose wheels keep the ship from pancaking or nosing over. Both elements of landing gear are retractable during flight. Before landing, the pilot must jettison the lower hin of the vertical stabilizer, which would otherwise be in the way; he touches off explosive bolts. Before the next flight, a new fin has to be installed.

• Finding Out—Construction of three X-15s was authorized in December, 1955; the three will cost around \$120-million, including related research. The project is backed by the Air Force, Navy, and National Aeronautics &

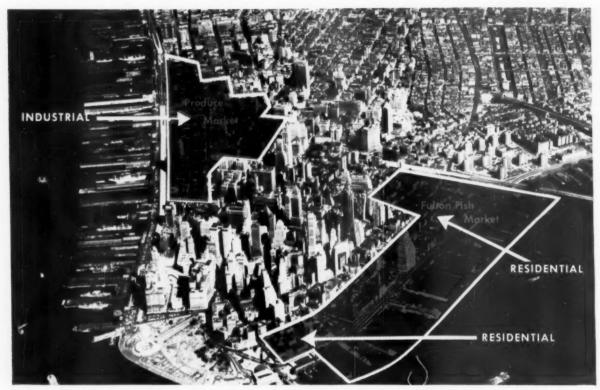
Space Agency.

Its main purposes: study of the practical problems of flight conditions beyond the earth's atmosphere, the reentry problem, effect of heat on materials, control requirements at extremely high altitudes, the effect of weightlessness, acceleration, and deceleration on man.

In a typical flight, the pilot will experience weightlessness for about five minutes. Because gravity forces at certain points in his trajectory will hold his arms helpless in the cupped arms of his seat, the controls are designed to be operated by wrist motion

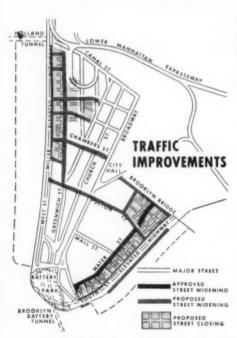
alone.

Controls, piping, and wiring from the cockpit are carried in external "blisters," leaving the 50-ft. fuselage to serve as a fuel tank. The metal basically used in the ship, which is 65% welded, is Inconel X, which can withstand a temperature range from the minus-300F of the liquid oxygen to the plus-1,200F of atmospheric friction.



TWO RIVERSIDE AREAS would be redeveloped, in the master plan of David Rockefeller and associates to bring . . .

## New Life for Lower Manhattan



TRAFFIC in the financial area would be unsnarled by widening some streets, closing others, adding an Expressway.

New York's city fathers this week had before them a broadly sketched master plan for traffic improvements, rezoning, and redevelopment aimed at halting the blight and congestion creeping into Lower Manhattan, and so preserving the integrity of the nation's financial center.

The plan was no product of dreamers. It was prepared after many months of study by a committee of leading businessmen headed by David Rockefeller, vice-chairman of the Chase Manhattan Bank.

The committeemen stuck to the broad outlines; theirs is no blueprint of detailed projects. That's because they wanted to avoid controversy over specific items that could leave the entire project stillborn. What they did give was a framework in which later individual projects could find their own places.

• Finding the Money-Methods of financing were left equally open with no estimate of how much might be needed. Presumably money for traffic improvements would come chiefly from governmental sources. Redevelopment is likely to fall into the federal program for urban renewal. Where private capital is needed, Rockefeller and his associates

will find it-but strictly on a sound investment basis. "This is no philanthropy," Rockefeller stresses.

Inner decay and competition from without have worked at Lower Manhattan for years, threatening some of the most valuable real estate in the world. Decay spread out from the waterfronts of the Hudson and the East River. The flowering of spacious new buildings in mid-Manhattan has lured some tenants northward, endangering the cohesiveness of the financial area (BW-Jul.16'55,p68).

The first countermove came late in 1955, when the Chase Manhattan ran up the flag of faith in the downtown area by announcing it would build a 60-story, \$125-million home office building. Now, the Chase's Rockefeller and his associates have tried a much longer stride. Their proposals, as codified by the architectural firm of Skidmore, Owings & Merrill, have three major sectors:

Traffic improvement. Lower Manhattan can be reached fairly easily by rapid transit or car from the rest of the city, but its internal movement is strangled by narrow, crooked streets. The map (left) shows how the committee wants to widen some streets, close others. It

Another insurance "extra" from friendly American Mutual men ...



# This friendly Am man can slash the cost of your casualty insurance!

Like hundreds of A<sub>M</sub> policyholders, you can reduce overhead and headaches by putting all your casualty insurance problems in the hands of your *friendly* A<sub>M</sub> man.

Through prompt and regular attention to your insurance needs, he can make sure you have just the right amount of coverage for each exposure to loss without loopholes or overlapping. And working with him to give you a complete package of modern insurance services are other AM specialists such as:

Production-minded Safety Engineers who help you prevent costly accidents; Claims men who quickly and fairly settle claims; Industrial Medicine experts who make sure the injured get the best care to speed their return to work.

These and all other AM specialists are as near as your phone—ready to give you better insurance protection at the lowest possible cost.\*

\*Hamilton Paper Co., another A<sub>M</sub> policyholder, saved \$106,492 on lower insurance costs in 11 years through good safety experience... gained another \$31,113 through A<sub>M</sub> mutual dividends. Why not call your friendly AM man now! Or write American Mutual, Dept.BW-15,142 Berkeley Street, Boston 16, Mass,

# American

LIABILITY INSURANCE COMPANY

Your friendly Am man can advise
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Leading writers of Workmen's Compensation, all forms of Liability, Crime, Accident and Health Insurance

urges construction of the proposed 580-million Lower Manhattan Expressway. Some of the proposals have already been O. K.'d by the city, or are already

under consideration.

Rezoning. There are no building restrictions on 60% of the land in the area; theoretically, a glue factory can be run up next door to a church or a costly temple of finance. The committee urges that most of the area be limited to commercial use, including some land toward the East River toward which the financial district is spreading. Land toward the Hudson waterfront would be open to industry, provided the industries actually needed to be near the piers or Wall Street. Tracts near Brooklyn Bridge and Battery Park would be reserved for residential use.

Redevelopment. The picture (page 32) shows two major areas that the committee believes should be redeveloped on a big scale, with the removal of the Fulton Fish Market and the produce market to other, as vet un-

specific parts of the city.

The fish market has long outgrown the need to be on the waterfront; only 8% of its wares still come in by boat. Its concessionaires are not likely to protest at moving, provided they can be put down together at a new site, since they cannot exist in separation. The same is pretty much true of the produce market, most of whose truck-hauled volume need not pass through Man-

Under the plan, the eastward inching of the financial district would be channeled into the fish market area, along with new, walk-to-work apartments.

· Objections-Despite the broad and flexible nature of the plan, some objections have already arisen, even within the Rockefeller group. The widening of Fulton Street is dimly viewed by some; others question the wisdom of building 4,000 middle-income apartments for bachelors and older workers in a district that altogether has only 4,000 residents, piled into 900 generally dilapidated units.

At the time when the Chase Manhattan announced its new building. Rockefeller set out to gather his group, originally some 50 men. He enlisted such men as Henry C. Alexander, chairman of J. P. Morgan & Co.; John D. Butt, president of the Seaman's Bank for Savings; G. Keith Funston, president of the New York Stock Exchange: James A. McLain, chairman of the Guardian Life Insurance Co. of America; Cleo Craig, retired chairman of AT&T; Henry S. Morgan, partner in Morgan Stanley & Co.; and Howard C. Sheperd, chairman of the First National City Bank of N. Y. Eventually, the group merged with the old Downtown Manhattan Assn. to form the Downtown-Lower Manhattan Assn.

## War on Phony Bargain Prices

FTC is distributing a guide book on what it considers deceptive price advertising to Better Business Bureaus in a move to strike locally at the offenders.

The heralded drive by the Federal Trade Commission to curb what it calls "trickery in price advertising" is now under way. Main target is retailer advertising that leads the consumer to believe a regular price on an article is

really a bargain.

The commission opened its campaign with a salvo of press releases, warning offenders it means to get tough. But its big gun is an official pamphlet, Guides Against Deceptive Pricing. The guide book, technically for use of FTC's staff, actually is intended for distribution and use by Better Business Bureaus throughout the country

· Statement of Principles-The guides issued by the commission define no new illegal practices. Their purpose is to state the principles the commission uses in deciding whether a price advertisement is false and thereby spotlight advertising evils that have misled the public and often injured merchants

who advertise prices honestly.

In its "war," the commission actually is depending pretty much on the Better Business Bureaus and such civic organizations as the Advertising Federation of America to do the fighting and make the significant gains against phony price practices. AFA already has rallied to the cause by urging member chapters to cooperate.

· Record Case Load-FTC will back up the jawbone campaign of the Better Business Bureaus by filing the same kind of cases against alleged phony pricing practices it always has.

The commission already is prosecuting dishonest price advertisers at an unprecedented rate. But it is under no illusions about the results of all this legal activity. If prosecution alone were the answer, FTC reasons, some progress already should have been made. Instead, Chmn. John W. Gwynne says the problem today of "lies about bargain prices . . . is growing worse." And Gwynne frankly concedes the problem may be just too widespread for the commission to control.

· Limited Jurisdiction-FTC is handicapped in its war against offenders by its limited jurisdiction. While muchif not most-of the worst kind of price advertising is employed by local merchants in local ads, the commission can act only where interstate commerce is involved. Yet, it often is the excesses of the local merchants that force the big stores into the same kind of questionable advertising.

In addition, the commission's budget makes no room for an important build-up of staff. It will prosecute wherever it can, may even handle an increased load of price advertising cases. But there is no doubt the commission hopes its price guides and its threat to get tough will encourage voluntary cooperation from advertisers and media on the local level.

This is where the Better Business Bureaus come in. Some bureaus-New York, for one-will be holding meetings with leading department stores to try to set the leadership in following the commission's guides. Others will go after newspapers and other advertising media to take a stand by setting up common vardsticks for both intra-state and inter-state advertisers.

· FTC's Guides-Here are the major

provisions of the FTC's pricing guides: · In savings claims, no statement can represent or imply a reduced price unless the price applies to a specific article-not just comparable merchandiseand is a saving from usual retail price.

· Articles should not be advertised as reduced in price if the former higher price is based on artificial markup.

· Comparable prices for comparable goods may be used if the advertiser makes clear the price is the price of comparable goods and not the former or regular price of the article being sold.

 "Special sales" prices must not be advertised unless there is an actual price cut from the customary retail price of the seller or a saving from the regular price in his trade area.

· "Two-for-one sales" claims may be used only if the price of the two items is the seller's usual retail price for the single article or is the regular price in his trade area.

· Half-price, 50% off, or le sales must be factually true and, if conditioned on purchase of other merchandise, this must be conspicuously dis-

· "Factory" or "wholesale" prices must not be advertised unless they really are the same prices the retailer regularly pays and are less than customary retail prices in the area.

· Manufacturers may not "preticket" articles with a price above the

usual sales price.

· No comparative price can be used in advertising articles that are imperfect, irregular, or seconds, unless it is made clear that comparative price refers to price of the article if perfect.

# Meet a beautiful new fleet car built to



# save you money... PLYMOUTH '59

NEW MODELS... now 29 gorgeous new Plymouths to pick from in 3 smart lines. Everything from flattering Sport Fury models to money-saving Savoys.

NEW ECONOMY...new 3-stage carburetor and Fuel-Saver Choke, new economy and durability features throughout to keep you comfortably "under budget."

NEW LUXURY... stunning new styling inside and out to reflect your company's good taste. Wins compliments today, trade-in dollars tomorrow!

NEW POWER... New Golden Commando 395 for peak

performance, Fury V-800 (two-time Mobilgas Economy Run Champ) or PowerFlow 6 for peak economy.

NEW COMFORT... famous Torsion-Aire Ride at no extra cost. Or optional new Constant Level Torsion-Aire to keep your cars always level under stress loads.

NEW FEATURES... new Instant Gas Heater delivers warm air in just 30 seconds. New Swivel Seats boost driver morale, impress customers. New Mirror-Matic rear-view mirror automatically dims headlight glare from following cars. All new, exciting Plymouth options ready for you!



The fleet's in—see your Plymouth dealer today!

Get the complete story on the car that's today's best fleet buy...tomorrow's best fleet trade...

Plymouth

## In Business

#### Merger of May and Hecht May Create New No. 1 Department Store Chain

A new challenge for the title of the biggest U.S.

department store chain is in the making.

Word came out this week that May Department Stores Co. of St. Louis is planning to merge with Hecht Co. of Baltimore. May ranked No. 3 among department stores last year. The addition of Hecht's \$104.7-million would bring it a total of \$638.3-million for the last fiscal year. On that basis, it would nose out Federated Department Stores, whose sales of \$635-million gave it the top spot last year (BW—May31'58,p56). Federated adds, though, that for the 52 weeks ended Aug. 26, its sales still topped those of May and Hecht for a similar 52 weeks.

May has been acting like a company set to go places. In August it opened its Denver acquisition, Daniels & Fisher, and a whopping branch in Cleveland's South shopping center. It is building a new branch in suburban St. Louis, has announced a new San Diego shopping center. The acquisition of Hecht gives it a firmer hold on the Eastern seaboard—a big Washington (D. C.) store, plus the Baltimore stores.

# Supreme Court to Hear Arguments On Who Controls Variable Annuity Sale

The Supreme Court has agreed to hear arguments on the controversial question of whether the Securities & Exchange Commission or the state insurance authorities have jurisdiction over sale of variable annuities (BW–Jun.28'58,p110). SEC argues that the variable annuity—whose value fluctuates with stock prices—is not an insurance policy but a security, and so subject to its regulations.

If the decision goes against SEC, it will be a major blow to the mutual fund industry. Unhampered by SEC restrictions on sales promotion literature, the variable annuity would become a major competitor of the

mutuals.

# Atomic-Age Increase in Radioactivity In U.S. Foods Found Generally Slight

Radioactivity from atomic tests and other manmade sources has had a negligible effect on the vast majority of food products consumed in the U.S. That's the conclusion of Pure Food & Drug Administration chemists who compared nearly 1,000 samples of food packed before the 1945 dawn of the Atomic Age with matching items of more recent vintage.

Tea showed up worst, with samples from the 1956 and 1957 harvests averaging 30 times more radioactivity

than the pre-1945 crops, while a few specimens ranged from 109 to 135 times as much. The FDA men said that recent tea crops very likely contain more than the safe limit of cancer-producing strontium 90, but they added that tea drinkers in practice have little to fear, since 83% of the radioactivity remains safely in the tea leaves after brewing. Other findings included:

Sea foods. Generally trended toward higher radioactivity, though shrimp, lobster, and crabs showed no

trend at all.

Dairy products showed a "statistically significant" increase, but well within safe limits.

Vegetables, fruits, meat products, wheat, sugar, jams, and bread got a clean bill of health.

#### Army Battles NASA to Keep Control of Redstone and Jet Lab

The Army this week is locked in bureaucratic battle with the National Aeronautics & Space Administration, the new civilian space agency. NASA, which has already taken over technical direction of the lunar probe and other space projects from the military, now wants to manage the Army's famed Redstone research facilities in Alabama and the Los Angeles jet propulsion lab, operated by Cal Tech.

The Army is resisting, arguing that the loss of Weinher von Braun and other German-born space scientists would delay development of assorted missiles. The two labs employ more than 2,000 civilian scientists and

engineers.

#### **Business Briefs**

Standard Oil Co. (New Jersey) this week increased its ownership of Humble Oil & Refining Co. from 88% to a reported 96%. In an offer closed last Tuesday, Standard swapped five of its shares for four of Humble; Humble stock, \$56 at the time of the offer, has since climbed above \$70.

Cash-hungry Penn-Texas Corp. is offering 1,488,438 new shares to stockholders at \$5 a share—against a going rate of \$7.50. Proceeds will help P-T buy Col. Robert Morse's 297,231 shares of Fairbanks, Morse, which give it control of FM (BW–Sep.13'58,p42). The price to Morse: \$9.6-million.

Wrong name: The small business investment company announced in New York (BW-Oct.11'58,p23) should have been identified as First SBI Corp., rather than Standard Financial Corp., which is the sponsor of the new company.

New York's Chase Manhattan Bank this week announced it was introducing a "charge account" plan, which will extend credit to consumers buying goods throughout the city. Chase is providing consumers with credit cards, expects to enroll most of the city's merchants as customers. The plan, first of its kind in New York, will provide immediate credit to merchants, give consumers five months to pay.



# The man who needs a new machine tool is already paying for it

Who says so? The man who has one, and paid for it out of profits! And here are capsulated case histories to prove it:

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## Cost Cutting Ideas for Your Office...

COST REDUCTION, a vital problem in all divisions of a business is nowhere as challenging as in the administrative departments. Office costs, having trebled during the past decade, are today of primary concern to top management.

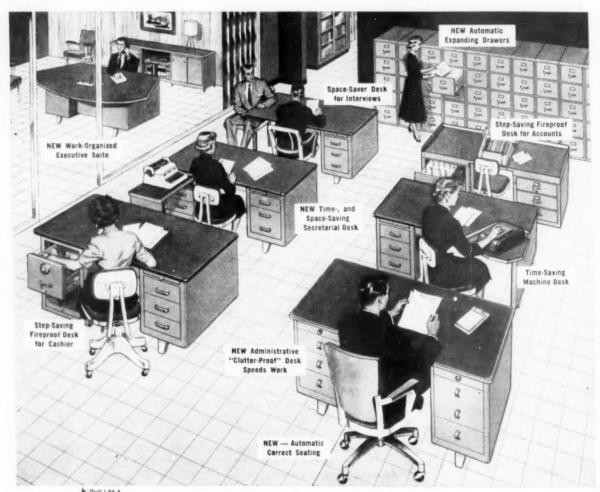
It is in the record that since 1899 Shaw-Walker has been equipping business with "time-engineered" office facilities as inventive and ingenious as American production techniques, — that Shaw-Walker equipment and systems have cut office costs, saved floor space and made offices more livable.

For today's cost-conscious management Shaw-Walker "time-engineering" research has now produced — The work-organized "clutter-proof" desk;

Automatic expanding file drawers; Step-Saving Fire-Files and fireproof desks that protect records at point-of-use; Labor-Saving equipment and systems for tape handling; Error-Proof filing systems; Automatic correct seating chairs; Time-Saving payroll plans; and Numerous Other Devices that facilitate recording, filing and finding of records.

Some of these "cost-cutters" are pictured here. All are in the 252-page Shaw-Walker Office Guide.

Throughout, descriptions plainly state economies you can expect from Shaw-Walker "time-engineered" equipment and systems. Free to Management when requested on business letterhead. Write Shaw-Walker, Muskegon 57, Michigan.





### WASHINGTON OUTLOOK

WASHINGTON BUREAU OCT. 18, 1958



Keep a close eye on Eisenhower's current political swing. The visit to the farm belt this week and the Far West next week may well provide some fresh clues as to how the Nov. 4 voting will go.

Here's the point: The President's 11th hour campaign was decided after party leaders became convinced they faced the definite possibility of a major off-year defeat at the hands of the Democrats. In fact, the GOP worry is that losses in the House and Senate this year may be so great that control of Congress will remain with the Democrats after 1960, and that the GOP will not be able to recoup even if it wins the White House at that time.

#### Eisenhower will expand his campaign tour-IF:

- If he can create enthusiasm among party workers. Word coming into the Washington headquarters of the GOP is that state, county, and city workers are discouraged—not really humping to get out the vote.
- If he can persuade contributors to put money on the line. The GOP is short of cash. In some states, radio and TV spot programs are being dropped by GOP candidates. Democrats have been able to pick up this time, often with funds raised by labor union political action groups.
- And if it appears Eisenhower can turn the tide. It's a fact that the President has no love for partisan politics, despite the effort to picture him now as full of campaign enthusiasm. He sees the voters' choice as simple—between "sane, sound, logical government" under the Republicans, and "radical government" under the Democrats.

No major shifts in policy are in sight—no commitments to the political blocs which play a big part in the politics of today, and which in the past have given the Democrats many victories.

There will be more talk of economy. The idea of getting spending back under control so that taxes can be cut. The foreign issue will be handled on the basis that Eisenhower ended the Korean War and has kept the nation out of war since that time. The fact that business now is on the rise, with more jobs, good pay, and high profits in prospect will be played up.

The Democrats are being more specific with the voters—trying to exploit local issues, which are much more decisive in House and Senate contests than the national issues, on which the President will concentrate

To the farm states, the Democrats are promising higher prices—prices supported by the government.

To the housewives, they promise an end to the inflation which has been cutting into the buying power of the market-basket dollar. There is no real program behind the promise, but in politics that doesn't matter.

To the workers, the promise is of more jobs at higher pay. Many candidates on the Democratic side have strong union backing.

Take a look at labor's program for the next Congress—a program which is getting strong backing among Democratic candidates in the Northeast and the industrial sections of the Midwest and Far West:

A higher minimum wage, \$1.25 per hour, with broader coverage to bring in many retail and farm processing workers now exempt.

Special benefits for the aged—hospital, nursing home, and surgical

#### WASHINGTON OUTLOOK (Continued)

WASHINGTON BUREAU OCT. 18, 1958

care for everyone receiving Social Security benefits. Payroll taxes would have to be upped to finance this.

More civil rights legislation, especially on the job side of the issue.

Federal aid to education, for both school construction and teachers' pay. A big push for this is building up.

More public housing for low-income groups. This invokes a major extension of federal urban renewal and slum clearance programs.

Federal aid for depressed areas—long-term, low-interest loans from Washington to attract employers.

Self-financing of TVA, and extensive government development of power from the atom as a fuel.

The "right-to-work" issue, up in six states in the November voting, is costing the GOP money. The headquarters staff in Washington says that many past campaign givers are putting money directly into this fight, instead of passing it along through the party where it would go to candidates in trouble. This is said to be especially true in Ohio and California, where the GOP has close and bitter contests on its hands.

Calls for help from Eisenhower are on the rise. Some of these come from candidates who only a few months ago were saying that they wanted to go it alone this fall—that Eisenhower intervention would hurt and not help them. The only explanation is that these candidates now realize that Eisenhower still has a personal appeal and following which is much broader than that of his party. Eisenhower may hit such states as West Virginia, Indiana, and Minnesota before the November voting.

The business trend favors the GOP this fall.

Unemployment is turning sharply down. September showed a drop of near 600,000—announced within the past week. October will also show a drop. The announcement probably will be speeded up to hit the news before Nov. 4, when the voters go to the polls.

Major strikes are over. Auto and other workers fared surprisingly well at bargaining tables in a recession year. Other workers will benefit as their contracts come up.

Watch for improvement in the budget figure.

Spending probably will fall short of the \$79.2-billion forecast for the 12 months ending next June 30. The Pentagon is slow in getting its spending up to schedule. And it's under pressure to keep outlays down.

Revenues are picking up. The fall rise in business exceeds the earlier Washington expectations (page 23).

Figures will be revised in January, when the government will have the results on six months of the year and will be guessing on only the last six months. Officials are reluctant to set new totals now—they fear these would be considered political. But there is a feeling that the deficit, \$12.2-billion by last official estimates, will be closer to \$10-billion. Such a decline could result in hopes for a tax cut by 1960.



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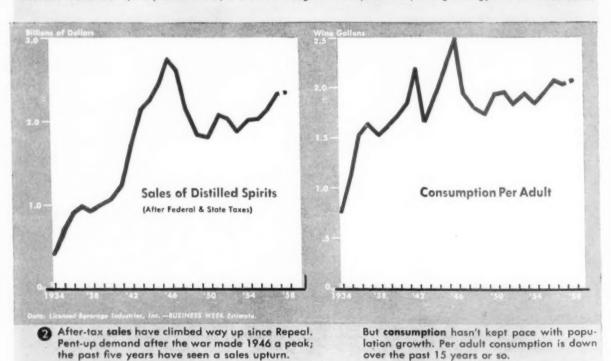




# Liquor, at 25-Year Mark, Turns to



Repeal put the liquor industry back in business 25 years ago. Looking back, the industry says it hasn't had a normal year in that time. World War II, the postwar boom, and Korea brought shifts in production, selling strategy and consumer tastes.



# New Ways

0

Stocks of aging whiskey govern selling strategy. World War II interrupted the post-Repeal buildup. During the Korean War, some distillers stocked heavily in anticipation of shortages that never developed.

Marketing emphasis shifted to blends during the war period because they conserved stocks. As aged whiskey accumulated, some distillers began to push bonds and straights.

After the war, competing products, such as Scotch, Canadian, gin, and especially vodka, gained.

For the U.S. liquor industry, 1958 is a year of hasty backward glances interrupted by the more pressing demands of sharp current controversics and new competitive struggles.

• The 25th anniversary of the Repeal Amendment gives rise to some industry stocktaking of its progress over the past quarter-century (left). But other events, more meaningful for today's complex, fiercely competitive industry, leave very little time for nostalgia.

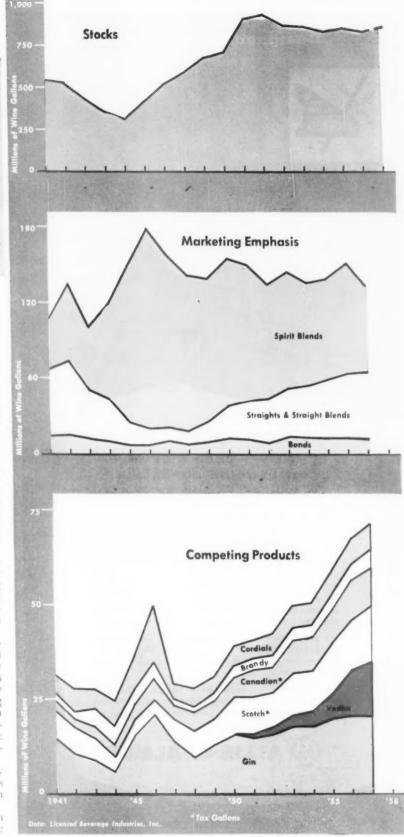
• Passage of the Forand bill, including a bitterly controversial provision lengthening—from eight to 20 years—the period distillers may hold whiskey in warehouses before paying the federal excise tax, foreshadows a new round in the battle of straight whiskey vs. spirit blends (right).

• The Saturday Evening Post's decision to accept liquor advertising for the first time in the magazine's long history not only procides a "moral victory" in liquor's fight for respectability, but helps to set the stage for a new kind of industry effort.

• Coming Battles—The drive foreshadowed by the Forand bill provision—a drive to sell much older straight whiskey than is usually sold in this country—is already under way. This week Schenley Industries, Inc., which is spearheading the campaign, set up an organization called the Bourbon Institute, to promote straight whiskey sales and to give bourbon a distinctive identity comparable to Scotch and Canadian.

As the battle grows hot, the industry may see some shifts in company sales positions, and even a severe squeeze on smaller distillers.

The Saturday Evening Post's open door is a welcome sign in another





battle—one faced by the whole industry. The willingness of such family magazines as the Post to accept liquor ads will strengthen the industry's present tentative attempts to find more effective ways of boosting liquor sales. The evidence of the past 25 years suggests that the liquor industry's growth has not kept pace with its potential market. Unless sales methods are strengthened, some industry members believe, only a moderate growth—perhaps even some decline—is in sight in the next decade.

#### I. The Industry Today

Though these new developments have kept distillers' eyes looking forward rather than back, the industry's current state rests firmly on the founda-

tion laid 25 years ago.

When the modern industry was created with the repeal of the prohibition amendment in December, 1933, four important companies were set to start operations. Two Canadian companies—Distillers Corp.-Seagrams, Ltd., and Hiram Walker-Gooderham & Worts, Ltd.—immediately opened U. S. companies. The other two were domestic outfits—the present Schenley Industries, Inc., and National Distillers & Chemical Corp.

Today, this well-known "Big Four" accounts for an estimated 65% of all U.S. whiskey sales, about 58% of all

distilled spirits.

Smaller distillers also jumped into business with repeal. Though mergers have thinned their ranks, those with established brands on today's market include such familiar names as Publicker Industries, Inc., Brown-Forman Distillers Corp., Fleischmann Distilling Corp., Glenmore Distilleries Co., American Distilling Co., James B. Beam Distilling Co., Barton Distilling Co., and Stitzel-Weller Distillery, Inc.

Though the foundation of a quartercentury ago remains, the super-structure has grown tremendously. In all, about 90 registered distillers now supply distilled spirits to some 1,500 wholesale and 200,000 retail outlets. Since repeal the U.S. has become the largest producer (63%) and the largest consumer (80%) of the world's whiskey, and the best customer for Scotch and Canadian whisky, too.

• Continuing Problems—The problems that beset the virtually new industry in 1934—and largely determined its course—are also still very much with it:

Inventories. Right after repeal, the industry, with only 11.5-million gallons of aged whiskey (left over from pre-Prohibition days) available for sale, found its first job was to build up stocks. Inventory management was complicated by wartime and postwar developments (top chart, page 45). Since nearly all U.S.-produced whiskey is four years

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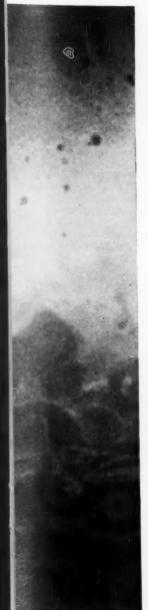
STEEL\_PLUS IN ACTION: RESEARCH

This picture of the inside of an open hearth furnace was taken by a high-speed motion picture camera that takes up to 3000 frames per second. When the pictures are projected at normal viewing speed, one second of action lasts almost

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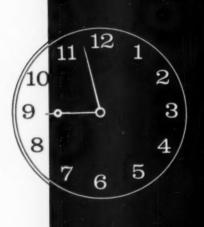
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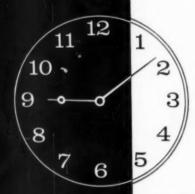


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STEEL AGE

old or more, aging causes a considerable gap between production and selling. Obviously, for efficient operation, distillers need to develop skill in market forecasting—a field in which they are still struggling with little success.

Marketing. The new industry had to transform itself from a pre-Prohibition bulk operation, mainly supplying whiskey in barrels, to an industry selling mostly direct to the consumer in bottles brands clearly identified with the producers. Distillers have been scurrying to keep up with advances in advertising and marketing, adapted to a highly competitive selling environment.

Regulation. The revived industry has become the country's most regulated—and most heavily taxed—industry, under strict national, state, and local control. Distillers sell to independent wholesalers in 29 states, to state boards in 17 monopoly states (Oklahoma and Mississippi are dry). Through the Distilled Spirits Institute, the industry has imposed other restraints on itself. Yet attacks from hostile groups opposed to liquor still recur, and an aura of vague social disapproval lingers from the Prohibition era.

#### II. Battle of the Straights

The new twist that the Forand bill gives to the battle of straights vs. blends is, of course, only the latest development in the basic postwar shift in the market shares of various liquor types. The middle and bottom charts on page 45 show how straight whiskey brands have virtually put an end to the dominance held by spirit blends during and right after the war, and how Scotch and Canadian whisky and of non-whiskey liquors—notably gin and vodka, have grown (BW—Mar.1'58.p43).

Whiskey remains the basic product—about 75%—of the liquor market. But since 1949 blends have slid from about 66% of liquor sales to 34%, while straights jumped from 9% to 25%.

The postwar rise of straights, many industry people say, was only to be expected. To some extent, they point out, the huge wartime blend market was artificial, fostered by whiskey shortages. The increase in supplies after the war brought rapid-fire maneuvers and shifts of strategy among the Big Four. Seagrams stayed with blends, built up Scagrams 7-Crown to the country's topselling whiskey. Hiram Walker scored with lower-priced blends. National Distillers moved into straights, made Old Crow the leading straight brand. Schenley shifted its weight to straights.

• How Far?—The big question now is how much farther the comeback will take straights. Vice-Pres. Carleton Healy of Hiram Walker believes "straights will flatten out at about half the whisker market." As things stand, For what it's worth ...

# "Just compensation" in condemnation of property

from the CLIENTS' SERVICE BULLETIN of The American Appraisal Company

Throughout the land, vast projects are under way involving the acquisition of private property for public use, under the right of eminent domain. For example, growing municipalities must acquire property for wider streets, schools, playgrounds, housing projects.

The right of government to acquire property for general welfare is unquestioned, but the Fifth Amendment to the Constitution provides this safeguard to the owner "...nor shall private property be taken for public use, without just compensation."

The interpretation of "just compensation" frequently is the subject of differences of opinion. The courts have held that "market value" of the property is the correct measure of just compensation.

Although the objective is frequently the acquisition of bare land, the courts have recognized that owners must be compensated for permanent improvements, which cannot be removed and so are a part of the realty. Courts have often held that permanently attached fixtures are likewise a part of the realty.

The simplest cases are those in which the entire property is taken. Where only a portion is involved, it becomes necessary to consider not merely the value of the property taken but also the loss to the property remaining. This loss to the remaining property may be negligible or substantial. Thus, a new highway cut across a corner of a farm may not affect the value of the remaining farm land—but 30 feet taken from a commercial building may destroy the value of the entire building. The measure of damage under "just com-

pensation" is the difference in the market value of property before and after the partial taking.

Confronted with a condemnation threat, the property owner needs the best possible assistance to present his case in a complete and convincing manner. Carefully documented evidence will usually afford a basis for a just settlement and avoid lengthy litigation.

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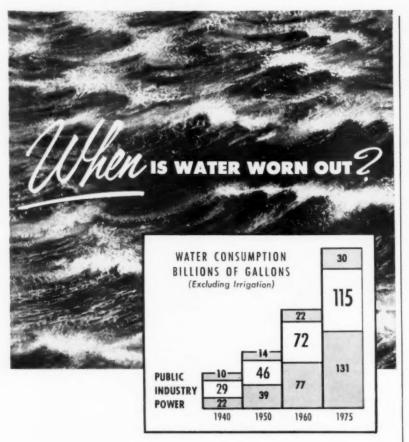
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several developments signal the new and hotter phase of straights vs. blends:

• The big blend distillers are entering the straight market. Hiram Walker has Ten High and Walker's Deluxe on the market. Seagrams, the long-time holdout and industry sales leader, has put its first straight bourbon, Four Roses Antique, on the market; will follow with a second, Hunter; and has been negotiating to buy James B. Beam, with its established line of straights.

• Within the straight market, competition has developed between traditional heavy-bodied, 100-proof whiskey and a less expensive, lighter-bodied, 86-proof product. National Distillers started a few years ago with lower-proof Old Crow, followed with Old Taylor, and announced a few weeks ago it would offer Old Grand-Dad in 86-proof. Other brands such as Glenmore's Kentucky Tayern are following what seems a consumer trend. But some companies are holding out. Brown-Forman, after much soul-searching, decided to hold the line on its popular bonded bourbon, Old Forester.

 Schenley is behind the third phase of the straight battle—the drive to market older straights eight to 10 years old—made possible by the bondextension provision of the Forand bill (BW-Aug.2'58,p28).

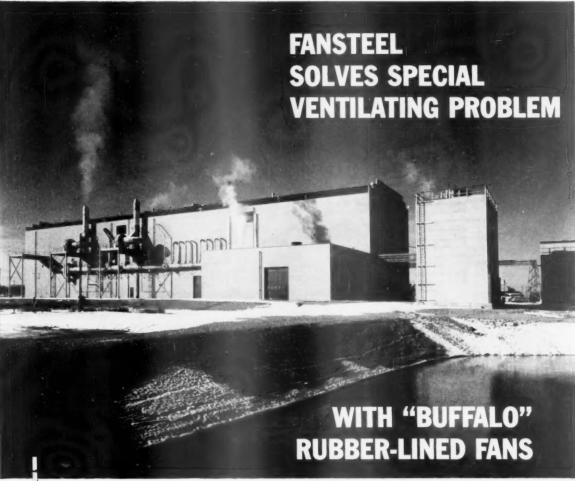
• Inventory Buildup—Stocks played a determining role in this tactic. Before passage of the bill, distillers had to pay the federal excise tax, now \$10.50 per gallon, on aging whiskey at the end of eight years whether or not they withdrew it for sale.

Since paying the tax and leaving the whiskey in storage would involve a tremendous financial burden, this "force-out" gave distillers two equally impractical alternatives: (1) Pay the tax and try to sell or export the whiskey, or (2) destroy or redistill it. Usually, the whiskey was dumped on the market at distress prices or redistilled.

What made the problem acute was the Korean War buildup of stocks, particularly by Schenley and Publicker, which later demand failed to reduce sufficiently. Last year, some 53-million gallons of seven-to-eight-year-old whiskey, and 91-million gallons of six-to-seven-year-old whiskey were in inventories—much of it in the hands of the two companies, the industry believes. Taxes on this 146-million gallons would have been due this year and next.

• Victory—Lewis Rosenstiel, chairman of Schenley, led the right to extend the holding period from eight to 20 years, arguing that this would benefit all U.S. companies by increasing the market value of their inventories and stabilizing prices through keeping distress whiskey off the market.

Nevertheless, many small distillers joined Seagrams and Hiram Walker in



New Fansteel Metallurgical Corp. Tantalum Plant in Muskogee, Oklahoma

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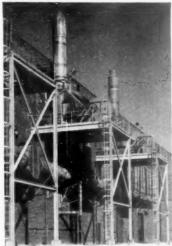
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ORIGINATORS OF

"TOUCH-STENCILING"



opposition. They opposed not the extension but its application to existing stocks rather than just to future inventories-figuring Schenley would get a competitive edge by selling its older whiskey on the basis of age.

Schenley won its point. Today, though the Forand bill contained other provisions regarded as beneficial-such as granting tax refunds for damaged whiskey-a lot of the industry feels the time extension's chief effect was to get Schenley off a very sharp hook.

Some distillers point out that sales of older, premium priced whiskey have always been small. But if Schenley develops a competitive market for older whiskey, that will probably put a greater strain on smaller distillers than on the other Big Three, since carrying whiskey inventories is expensive. Already some smaller distillers are beginning to react. Brown-Forman will in a few weeks abandon specific reference in advertising and on labels to age of its products. Chmn. Lyons Brown says an advertising battle based on age would mislead the public, and he wants to stav out of it.

#### III. Other Products Advance

It's no secret, of course, that since the war both domestic straights and blends have had a jolt from other liquors, as the industry has pushed other products and consumers have diversified their buying.

Sales of imported liquors have advanced steadily, now represent about 13% of total liquor consumption. Most of the big distillers conduct import operations, and independents also bring in foreign items. Many luxury imports, such as imported gins, cognacs, and cordials, have found appreciable sales.

I. M. Bomba, president of the Na-tional Council of American Importers and vice-president of Schieffelin & Co., attributes the success of imports to postwar prosperity, travel, and the desire to indulge a taste for prestige products. About a third of the import market is in the East, he reports, but it is growing in the Midwest and Southwest.

• Big-Timers-Two imports-Scotch and Canadian whisky-have become fairly important in terms of market share (about 7% of the total liquor market for Scotch, 5% for Canadian). The demand for Scotch, once limited to big metropolitan areas, is now regarded as national.

About 34 brands of Scotch advertise appreciably. But about 80% of Canadian whisky sales are accounted for by Seagram's V. O. and Hiram Walker's Canadian Club.

· Non-Whiskeys-Liquors other than whiskey have also spread out, almost doubling their market share since 1949, from 12% to 23%. Gin, with a mod-



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TABLES

STEEL EQUIPMENT

crate rise in market share, has supported this growth, but the real boost has come from the rapid rise of vodka. Before 1950, vodka sales were not even reported separately, but last year it grabbed 6% of the total liquor market.

#### IV. Profit Squeeze

By some yardsticks, the liquor industry has made substantial progress since repeal. The sales chart on page 44 shows a rising long-term trend (though somewhat distorted by the abnormal wartime demand). And total consumption is at a high level.

But the industry has become less profitable. In 1947, total before tax profits of 11 leading distillers came to \$256.5-million. By 1956, despite rising sales, their pre-tax profits had fallen to

5199-million.

It's the thirst for greater profits, in fact, that helps explain why many distillers are diversifying into other lines. National Distillers has moved into chemicals, which last year accounted for 38% of its earnings. Schenley has a pharmaceutical operation, Brown-Forman makes photographic supplies, Seagrams has been developing oil and gas properties. Hiram Walker, with the best profit-to-sales ratio in the industry, has stayed with liquor "we are concentrating our efforts on the business we know," says Hiram Walker Pres. Howard R. Walton. The company has expanded production of Scotch whisky, and has a strong line of cordials.

• Worry—The industry is also worried that this growth isn't keeping pace with market potential—a trend that has yet to be reversed. Consumption per adult, as the chart on page 44 shows, has failed to keep up with population growth. Some Gallup Poll data—admittedly crude—tell a similar story. In 1945, 67% of the adult population used alcoholic beverages. This year, estimates place users at only 55%.

What's more, the greatest loss of consumers has occurred in the 21-29 age bracket, the next greatest in the 30-49 age category. If that trend continues not only the percentage but the actual number of consumers could decline by 1970. If today's proportion holds steady, the industry can expect 9.4-million more consumers by 1970. But if the industry could restore even the 1947 proportions, it could gain 17.8-million consumers by 1970.

It's that possibility of loss, measured against the potential gain, that is stimulating the industry to seek more effective action on the sales front.

#### V. Cautious Advance

Moving in this direction is difficult, against many handicaps. A multiplicity of federal and generally conflicting state

regulations govern industry activities to the smallest details—such as size of promotional posters, contents of ads. Brown-Forman, like many others, must prepare 27 versions of each ad to satisfy state requirements. The industry feels states could permit greater uniformity without sacrificing authority.

Since each state must be treated as a separate market and competition is strong, liquor marketing is characterized by price cuts and deals; this hinders orderly marketing and broad appli-

cation of sales policies.

More important as a sales restraint, many industry members feel, is liquor's high tax burden. Today, the federal excise tax accounts for about 40% of the price of a typical fifth of whiskey; state and local taxes bring the total to 55% of the price. The industry feels this not only depresses consumption but promotes the still flourishing moonshine activities—often big-time operations near metropolitan centers.

But the industry sees little likelihood of a tax cut, since liquor is still a politi-

cal hot potato.

• Slow—With these handicaps, the industry is moving slowly and cautiously to find new ways of selling—away from the old approach of merely meeting existing demand, letting growth come with population, avoiding any appearance of stimulating usage. Many executives are frankly nervous about this, understandably wary of stirring up opponents. It's not that they fear national prohibition, but rather attacks at local levels or restrictive legislation, such as a ban on national advertising.

"Every time we stick our head up," says one industry official, "somebody

takes a swing at it."

Advertising—This caution is clearly seen in the approach to advertising. To outside regulation, the industry adds its self-imposed bans, including no use of radio or TV, no women in ads, no ads in Sunday newspapers. (The Puerto Rican government a few months ago broke a Distilled Spirits Institute rule by showing women in a series of ads—but DSI prevailed in the end and the women were eliminated.) Some industry members feel this ban may be lifted in a year or so. Using radio or TV is unlikely.

Some of the restrictions are beginning to pinch. The liquor industry, like others, has felt the swing to the suburbs, the emphasis on family living. The ratio of sales for home consumption to those for bars is reversing itself since the war, now runs about 60% in favor of the home. But many advertising restraints, one official remarks, bar the industry from reaching this tremendous market and from associating moderate drinking with family activities.

The opening of the Saturday Evening Post's pages takes on more importance

from the fact that the industry is barred from many family media, such as Readcr's Digest, women's magazines, shelter magazines like Better Homes & Gardens, and some 700 newspapers.

• Maturity—After 25 years, the industry wants recognition of its increased maturity. Clark Gavin, industry marketing specialist, calls the industry's quarter-century record "notable in every respect." As evidence of maturity, the industry points to its approach to social problems such as alcoholism—a word no distiller would even have used 10 years ago. Today, the industry makes contributions to research into causes of the problem.

Many industry members hope this maturity will make its selling efforts more acceptable. These efforts are directed toward removing barriers to consumption, rather than positive encouragement. For example, the industry is turning to motivation studies on why people are afraid to drink. And LBI is feeling its way with a campaign, confined to the industry, that liquor consumed in moderation by the normal adult is not harmful but tends to be

beneficial.

#### MARKETING BRIEFS

Complete heating and cooling systems are now available on a lease basis to new or existing office buildings and factories (but not to homes). Hudik-Ross, mechanical contractor of New York and Hackensack, N. J., offers the package—including piping, sheet metal—on terms up to five years, with option to renew or buy. Advantages: no capital outlay by the lessee, and tax savings.

The 1959 Norge appliance line includes a full line of gas appliances: refrigerator, washer-dryer, range, and built-ins. Judson Savre, head of the Norge Div. of Borg-Warner Corp., told the American Gas Assn. this week that his company is already working with 81 major utilities to push this area of the appliance market.

. . . And at Westinghouse, Cris Witting, vice-president of its Consumer Products Group, said that a trek of 100 executives to visit 3,000 dealers uncovered optimism, more buying, even shortages in some lines. This year's sales won't match last year's, he said, but the gap is narrowing and prices are firming.

Ford stockholders got a scoop last week—a picture preview of the 1959 Fords. The previewer, prepared by Taylor-Merchant Corp., specialist in visual sales aids, is a small folding viewer with two color transparencies of the new cars.

### Invitation to SUDDEN DESTRUCTION



...even this tiny glow will actuate the super-sensitive, infra-red controls of the deadly Sidewinder missile.

Sidewinder, streaking through midnight skies on its mission of air-to-air defense, is but one dramatic example of Philco leadership in advanced infrared technology. Conceived by the Naval Ordnance Test Station at China Lake . . . developed by Navy and Philco scientists . . . engineered and produced by Philco, the Sidewinder is a result of close weapons systems development coordination.

In the forefront of infra-red research and solid state physics, Philco is pioneering detectors which cover the entire IR spectrum including; proximity warning indicators, advanced photographic (black light) techniques, high precision industrial IR electronics, search gear and fire warning systems. Here is dramatic proof of Philco leadership in technology, capacity and flexibility. In the Wonder-World of advanced electronics . . . look ahead . . . and you'll choose Philco.

At Philco, opportunities are unlimited in electronics and mechanical research and engineering.

Defender plane, armed with wing-mounted. Side-winder missiles pursues target. Side-winder is fired guided by informed, the missile "homes" on target bringing sudden and inescapable destruction.

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# Toll Roads Take Their Last Turn

Practically all the major toll roads in the nation's forsecable future appear on the map above. Most of them have been completed, except for a few short links such as the 15.1-mi. New England Thruway, which is now ready for business between New York City and the Connecticut Turnpike.

More superhighways will be built, of course, to carry the country's growing volume of auto and truck traffic. But they will be built by states and cities, mostly under the 13-year, \$100-billion (cderal highway program (BW-Jan.11 '58,p36).

Thus ends-at least, for the time being-the postwar flurry of toll road promotion. The end comes with many much-discussed projects still in the dream stage, and with the completed roads, as a group, falling short of even conservative expectations of traffic and earnings.

• Longer Haul—Two factors combined to end the growth of new turnpikes and to give the older ones a longer and tougher uphill haul to prosperity. One is the advent of the 41,000-mi. federal highway system; the prospect of toll-free superhighways made toll roads look less desirable. The other is the coolness of Wall Street bond underwriters, who thumbed down some new projects and set sterner terms for others, on the

grounds of the trouble that confronted older roads.

The New York Thruway easily got its financing for the New England section and its Berkshire connectors with the Massachusetts Turnpike, because a portion of its bonds are backed by the state's credit, unlike the bonds of many other pikes. Besides, the Thruway is rated as at least moderately successful. But roads that depend wholly on their revenues for the payment of bond in terest and principal are less in Wall Street's favor, thanks to the occasionally spectacular difficulties of a few pikes.

In the long run, bond analysts say,



the Remington

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# **NEW'59** for savings! TRUCKS



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Here, in all 371 models in the '59 Ford line, are modern features that cut costs or contribute to driver efficiency! Features like Ford's economical Short Stroke engines, a wider choice of transmissions, including Ford's new Heavy Duty Cruise-O-Matic, new cab comfort, the smoothest ride of any pickup!

And Ford has the industry's best durability record. A study of ten million trucks proves Ford Trucks last longer! See your Ford Dealer today ... go Ford-ward for savings!

# FORD TRUCKS

Less to own...less to run...last longer, too!

#### the apple that rocked the world

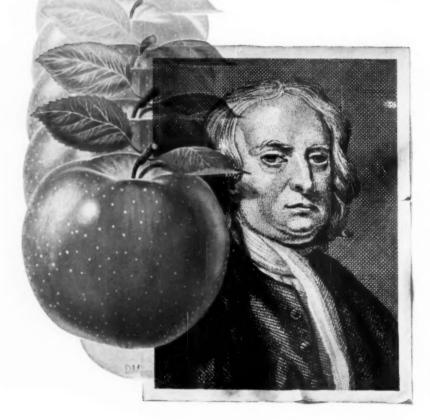
An apple fell . . . as millions had before it.

But the apple that struck Isaac Newton gave us the law of gravity.

So with all great advances. The mind of Man challenges the familiar. New concepts come into being,

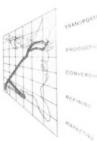
Like the long distance pipeline. Through this ingenious low cost method of transportation, all America can enjoy the benefits of natural gas.

From natural gas and oil...heat, power, petrochemicals that mean ever wider service to man.



#### TENNESSEE GAS TRANSMISSION COMPANY

AMERICA'S LEADING TRANSPORTER OF NATURAL GAS



most toll roads will earn enough to pay the interest and retire their bonds, but bondholders will meanwhile be on pins and needles.

 Bad Example—It's not likely, say the experts, that any other road on the turnpike map will suffer as dire a fate as the West Virginia Turnpike, known to cognoscenti as "The Road to Nowhere."

This 87.6-mi. ribbon of road from Charleston, W. Va., to the Virginia border was opened on Nov. 8, 1954, with the hope of attracting heavy trucking fraffic bound from Virginia to the Ohio Valley. The hope collapsed; feeder roads still had curves and grades that discouraged truckers, and the tolls looked high.

Less than four months after the opening, some financial counselors were advising their customers to sell their West Virginia bonds. Right now, revenues amount to only about 50% of interest charges. Maintenance costs are higher than predicted, and Wall Streeters consider the case hopeless unless the state rescues bondholders.

The pike has already defaulted on the coupons that were due June 1. As a result, the 31% bonds that were sold in April, 1952, at 99% of par are now available at about half that

• Turnpike Boom—After World War II, it became clear that traffic would quickly clog the nation's highway system unless something drastic was done. The quickest way of financing superhighways, it was felt, was by sale of bonds backed by toll revenues and, in some cases, the state's credit.

The Pennsylvania (built largely before the war) and New Jersey Turnpikes were an immediate success, with traffic and revenue far surpassing engineers' estimates. But the law of diminishing returns began to operate as more projects were launched and completed. Traffic and revenue began to fall below the predicted levels.

The reasons were many. In some cases, feeder roads and connections were delayed. In all cases, construction costs shot far above even the most liberal estimates. In other cases, truckers shunned the new pikes, and their comparatively heavy tolls had been counted upon to make the roads pay. Some toll road authorities contend that the scarcity of truck traffic is part of an anorganized boycott designed to force toll rates down; truckers retort that it is often cheaper and easier to stick to the old free roads, especially after auto traffic has been lightened by the turn-pikes.

 Massachusetts Pike—An example of inforeseen maintenance costs and toll losses can be seen in the Massachusetts Turnpike, 123 mi. long and open little more than a year. Last winter's severe 141.113 Shares

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October 8, 1958

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Worry is minimized through prompt notification of shipper and receiver when any schedule is interrupted. Try this new right arm to reach your customers! Ask our man!



**BALTIMORE & OHIO RAILROAD** 

Constantly doing things-better!

weather cost the road about \$800,000 in combined loss of revenue and additional operating expenses.

So far, this pike has carned only about 54% of its estimated revenues. It needs another 14-mi, section to tap its full potential, but financing is already in doubt. A veteran toll road underwriter predicts it will require special financing, probably early next year.

The indenture covering the original bond issue required that earnings of the original section, plus estimated earnings of the new segment, would have to come to 140% of principal and in terest charges before any proceeds could be applied to the final 14 miles.

• Federal System—The final blow to the toll roads' expansion came from the federal highway program, in which the U.S. pays 90% of the cost, the states only 10%. However, you car find turnpike enthusiasts who predict that "when the states realize that this is a 13-year program that will stretch out to 20 years or more, they'll wake up and take another look at the toll roads."

Chicago Troubles—Most turnpike experts are now concerned more with the problems of present roads that with the possibilities of new ones. On object of their concern is the new Calumet Skyway toll bridge, a shor bridge-highway that links Chicago with the Northern Indiana Toll Road.

The Skyway seemed as sure of success as a toll road could be—it was in the heart of Chicago and offered a clear alternative to the congestion of city streets. Most of it opened Apr. 16, with the rest on July 1. Average revenues for the first 19 weeks, however, came to only \$48,000 a week—interest, operating, and maintenance charges amount to \$75,000. Skyway bonds, which first were offered at par, are now down to around 70%.

Now the engineers are back studying the Skyway, trying to learn how to persuade motorists to use it. Toll rates for truckers and commuters are being restudied, a credit system for regular useris being considered, and more "traiblazer" signs are being put up along the approaches.

Even the moderately successful Nev York Thruway is making concessions. Last month, it announced climination of extra fees levied on truckers for "overdimensional" loads—longer, wider, or higher than specified limits. These truckers used to have to get a special hauling permit, pay an extra \$10 a trip, and pay a penalty of 1¢ or 2¢ per mile for each foot of excess dimension. Last year, the Thruway collected \$48,141 from 1,522 special hauling permits. Now that the policy has been liberalized, one trucker alone promised to haul 300 additional shipments over the road this year. END



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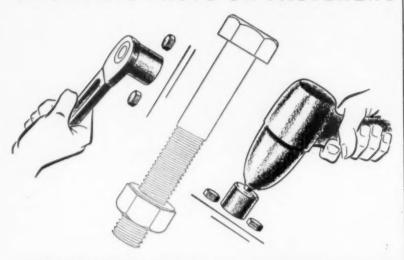
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Go the limit in tightening bolts. You'll find this not only more economical, but safer too. For the strength of a rigid connection depends not on how strong a bolt is, but rather on how much clamping force it exerts when tightened.

**Example:** A bolt good for 20,000 pound load is tightened to just 5,000 pounds tension. Believe it or not, *joint* strength from that bolt would be only 5,000 pounds.

Case History: Earthmover's bucket kept coming loose. Bolts were upgraded progressively, finally to alloy steel and to 1%-inch size . . . to no avail. Trouble was they still were not being adequately tightened. Bigger wrench, more torque and standard %" RB&W high tensile bolts stopped problem, saved money.

Obviously, the more of the fastener's strength you use, the smaller it can be. That's why RB&W High Tensile Bolts are such good buys. They have more strength to give. They cost less than the larger machine bolts or bright cap screws they can replace. Moreover, smaller bolts mean smaller holes to drill or tap. Smaller holes can often mean reduction in size of fastened members.

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R B & W FASTENERS-STRONG POINT OF ANY ASSEMBLY

#### Wall St. Talks . . .

... about growing "unfavorable" spread between stock and bond yields ... rumors sparking AT&T's rise.

The "unfavorable" spread is widening between stock and bond yields. Standard & Poor's indexes show industrial commons yielding only 3.41%, compared with 3.66% for long-term governments, 3.95% for tax-exempt municipals, and 4.10% for high-grade corporate bonds. Ordinarily, a differential so heavily in favor of bonds is considered an unhealthy stock market indicator, but this time few Streeters seem worried.

Rumors have speeded the sharp rise of AT&T, normally a slow-moving blue chip. The most popular tales have been: (1) a stock split is coming soon, with a dividend rise to follow; (2) if there's no split, you can expect a nudging up of the long-established S9 dividend, and/or a modest stock dividend. AT&T makes no comment, but many shrewd brokers call the stories bunk. Still, AT&T was selling this week around \$193, or 15% above its 1958 low of \$167.78. And it recently hit a \$195 level, the highest since it edged past \$200 in 1946.

The quirks of diversification: Streeters chortled at the news that Chicago's Wilson Bros., a maker of underwear and men's shorts, had acquired Scaife Co., a Pittsburgh manufacturer of missile products.

Tax-loss stock sales are up steeply, and they're likely to go higher before the year ends, brokers report. Right now, about half the proceeds of the sales are going back into the market, while the rest retires to the sidelines. Preferreds have been especial targets of selling.

The market value of Big Board commons is up to \$50-billion, says Harold Clayton, of Hemphill, Noyes & Co. The biggest individual gainer has been General Motors, whose value is up \$4.6-billion.

The Big Board seems headed for its biggest trading year since 1930. By last week, volume was close to 532.2-million shares, 28% above this time last year. Naturally, the price of Big Board seats is soaring. On Monday, there was a sale for \$110,000; that's \$10,000 above a sale last week and the highest price on record since one sold at \$113,000 in May, 1956.

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FIRST MERCURY In 1934, General Electric cointroduced the high efficiency A-1 Mercury Lamps that reduced the cost of industrial lighting.

1938



Precision PAR projector lamps with superb beam control, air-tight seal of lens to reflector.

1942 -

GENERAL (I) ELECTRIC

Instant Start fluorescent gave quicker start, long life because of the G-E triple coil cathode.

1945

Slimline fluorescent with slender. graceful tube for more attractive lighting systems.

1952



RC-1 Mercury Lamp with color improved reflector; phosphor coating increased lamp efficiency 54%.

High Output fluorescent delivered half again as much light as slimlines, more light from equal fixtures.

1954

Quartz Infrared - a powerful, conpact new heat source with high concentration of radiant energy.

Progress Is Our Most Important Product



GENERAL

# FROM GENERAL ELECTRIC



FIRST FLUORESCENT Exactly 20 years ago, 1938, General Electric contributed the first fluorescent—a revolutionary increase in lighting efficiency.

ISN'T IT AMAZING? Each of these lamp types, and improvements in lamps, for commercial and industrial lighting, were developed and introduced into public use by General Electric to give you more value for all your lighting costs. Here are fifteen outstanding, but by no means all, of General Electric's contributions. The proud histories of General Electric and the lamp industry have gone side-by-side since the basic contributions of Mr. Light himself—Thomas A. Edison.

ISN'T IT LOGICAL? The company that gives you more value in new lamps and new improvements—and has been making both for a longer time—is also the company that makes the lamps that will be your best bet for day-in, day-out service and lowest operating cost. If you'd like more value for all your lighting costs, call your local General Electric Lamp representative, or write: General Electric Co., Large Lamp Dept. C-842, Nela Park, Cleveland 12, Ohio.

1950



R-52 Reflector Lamp — sealed-in reflector never needs cleaning, 500-and 750-watt sizes.

1952



Rapid Start fluorescent brought faster, flickerlass starting without starters...cut maintenance, too. 1952



R-1 Reflector Mercury gave maintenance advantages of inside reflector, plus mercury lamp efficiency.

1955



RB-52 — This design improvement made practical a regular glass, 1000watt reflector lamp for high bay use. 1955



Bonus Line of filament lamps increased light output up to 15% by G-E stand-up filament design. 1956



Power Groove—This revolutionary lamp gives 2½ times the light of slimline; saves 5 to 20% on initial cost.



IT'S A FACT: Over the past 3 years, General Electric has averaged a new lamp every other working day! muscles of

#### MYLAR

make Columbia's new



# EXECU-TAPI

M-50

the strongest carbon ribbon ever developed



EXECU-TAPE M-50 STYLE RIBBON BY COLUMBIA

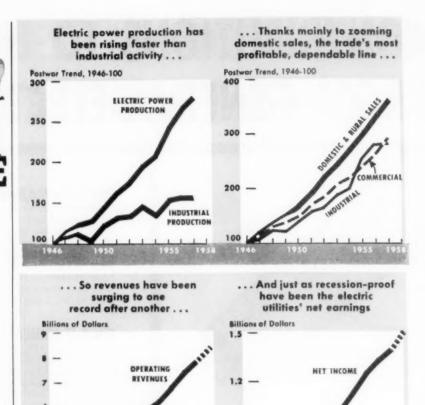
"Mylar," DuPont's super-strong, super-sheer polyester film, puts the muscles in Columbia's new Execu-Tape M-50 style ribbon, the new carbon ribbon that actually defies breaking, tearing or ripping by any business machine. Execu-Tape M-50 calls an emphatic halt to costly ribbon-fixing interruptions . . . keeps your machines breezing along. Ribbon changes are reduced, too: Execu-Tape M-50 is the longest carbon ribbon of its diameter there is.

In addition, Execu-Tape M-50 creates typing that challenges detection from actual printing: its rugged sheerness encourages the keys to transfer all the carbon to the typed page. You'll witness a sharpness of write that unmistakably says "executive" correspondence. And masters—for offset, hectograph and most copying processes—are sharper, surer, more masterful!

\*DuPont Reg. T. M. For more information about Mylar film, see DuPont advertisement on page 77



COLUMBIA RIBBON & CARBON MFG. CO., INC.
GLEN COVE, NEW YORK
COLUMBIA RIBBON AND CARBON PACIFIC, INC., BUARTE, CALIF.



0.9

## Utilities Come Up Smiling

The producers of electric power have added one more layer to the mountain of evidence that they are the nation's most recession-proof trade. Granted that the utilities did slip a bit during the recession from their early postwar pace, but the fall from grace was a tiny one compared with other trades, and already the industry is making a swift recovery from even that petty drop (charts). Here are some details:

Gross revenues for 1958 will apparently run about 6% above last year. That rate of gain stacks up well with the 5.3% rise in the 12 months ended last June 30, the 7% in calendar 1957, and the 8% in relatively palmy 1956.

Net earnings have done even better than revenues. For all of 1958, they seem headed for a close-to-7% rise above 1957. That compares with 6.5% for the year ended June 30, around 5% in 1957, and 6% two years ago.

The electric utilities' faith in the whole economy is one big reason why their profits pattern has been so far above the norm. Since the war, the trade has spent well over \$33-billion on new and more efficient facilities—by far the largest expansion program ever recorded by any industry. Increasing use of these facilities has helped the utilities fight off rising costs far better than most businesses.

For example, a modern 100,000-kw. generating plant needs only one fourth as many workers as a plant of the same capacity 25 years ago. Less fuel is consumed, too; at the war's end, it took 1.29 lb. of coal to produce 1 kwh. of electricity, last year only 0.93 lb. was needed. And a plant now being built boasts that it will need only 0.6 lb.

As a result of all this, the utilities over the years successfully have reduced the share of the revenue dollar taken

# CHEAPEST WAY YET TO DRILL HOLES

New Air-powered Bellows-Locke Drill Head Sells for only \$95.00\*

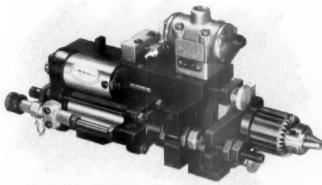


Not much bigger than a carton of cigarettes, the Bellows-Locke Model 22A Drill Head is the low cost answer for many machining operations in the softer metals, plastics and wood. Drill capacity in mild steel from No. 80 to 3/16" diameter drill. 2" stroke. Thrust two times air line pressure. Adjust-

able positive stop. Can be controlled by any standard four way air valve. Available also (at extra cost) with a built-in Bellows Electroaire Valve and hydraulic feed control.

\*As illustrated less chuck and pulley.

Write for Bulletin BL-22. Address The Bellows Co., Akron 9, Ohio, Dept. BW-1058. In Canada: Bellows Pneumatic Devices of Canada, Ltd., Toronto 18.



Model 22A Drill Head with optional "Hydro-Check" and "Electroaire" Valve Assembly

1196-B

# The Bellows Co.

DIVISION OF INTERNATIONAL BASIC ECONOMY CORPORATION

AKRON 9, OHIO



# MAGNETIC SOCKETS last ten times longer - give re-usable magnet bonus

Cutaway view showing socket, magnet, self-tapping screw. Snap-on magnetic sockets are available in the following sizes: 1/4-in. drive for 14, 16, 16-in. sockets; 16-in. drive for 16, 16, 16, 16, 17-in. sockets; 12-in. drive for 16, 17-in. sockets.

On actual customer test, this newly developed socket drove 112,320 self-tapping screws. A similar competitive socket, priced only about 30 cents less, wore out after driving only 10,530 screws. Both sockets were subjected to identical conditions.

Figure what you can save by switching to these new Snap-on sockets - in replacement cost - and in assembly line downtime, too.

#### and here's an Extra Bonus . . . re-use your magnets - save up to 50%

In addition to far greater life, this socket is available without the magnet. You simply tap or press the magnet out of the worn-out socket - insert it in the new one. You save 50 percent on the cost of a complete magnet socket. Snap-on has developed an inexpensive tool that inserts the magnet to exactly the right depth.

This is an example of Snap-on research and development that helps industry save time and money. Your Snap-on industrial tool specialist can show you many more. Branch offices and warehouses are conveniently located in 58 major cities throughout

the U.S. and Canada.



To re-insert, just tap magnet into socket with Snap-on assembly punch. The entire operation takes about a minute.



8100-J 28th Avenue . Kenosha, Wisconsin

by payroll. Last year, payroll ate up only 18% of the gross, as against 20.5% in 1951. Fuel costs have also been held in check, despite the upward trend in coal and oil prices.

· Tax Trouble-Taxes-local, state, and federal-are one item that the utilities have not been able to curb. Since 1946. the annual bill has climbed from \$639million to nearly \$1.9-billion. A year ago, taxes devoured 23.1% of the gross, compared with 19.1% a decade earlier, and 16.4% in 1939.

During these years, two factors have gone a long way to offset the industry's tax woes.

The easy money policies of the federal government in the early postwar years enabled the trade to finance much of its vast expansion at relatively low cost. In more recent years, the rates have been rising-as they may continue to do-but the effect on the utilities has not been severe. Despite the trade's enormous postwar borrowing, interest costs in the year through last June took only 6.7% of revenues, a little higher than 1957's 6.4% ratio, but well below the 12% in 1945, and 14.8% in 1939.

An improving "product mix." Under the stimulus provided by the nation's sharp physical and economic growth and the trade's smart promotional efforts, the electric utilities in the postwar years have been able to increase their residential sales-by all odds their most profitable and the last to be cut by recession influences-at a much faster pace than their much-less-profitable industrial load. With home appliances supplying the lift, average domestic sales of power last year reached a record 3,147 kwh., up from 1,438 kwh. only 10 years earlier. Thus, in the period, the average domestic bill almost doubled, to reach \$81.25, despite the fact that the average revenue per kwh. dropped from 3.09¢ to 2.56¢.

As a result of this trend, last year saw domestic and rural users accounting for 25.6% of the industry's total electric power sales vs. but 19.5% in 1946 and supplying as much as 43.1% of its gross revenues, compared with only 38.9% at the start of the postwar period. In the same period, on the other hand, the similar changes reflected in industrial power sales proved quite minor. Last year saw them responsible for 45.9% of sales vs. 45% in 1946 and accounting for 28% of gross, exactly the same as in 1946.

There's another factor that has helped the electric utilities: Both state regulatory agencies and utility managements have become more realistic about rate structures. The agencies have increasingly recognized that higher rates are often needed to meet rising costs and attract new capital, while management has become more aggressive in fighting for raises. END



People buy Scott Towels for many reasons:





Mr. Herbert J. Kreiling, Auditor, Scripps-Howard Pittsburgh Press, says:

## "Scripps-Howard people know paper...they like the quality that goes into every Scott Towel"

"Sure, you can quote me," says Mr. Kreiling. "Not long ago we at The Press switched to Scott Towels. I knew other Scripps-Howard papers were using them-and thought we'd give them a try. Here are the stories that came back to me . . . 'Now there's a paper towel that dries!' . . . 'As clean-looking as a fresh roll of newsprint!' As for myself, I find it a lot easier to do business with a reputable firm like Scott."



Your Scott distributor is in the Yellow Pages under "Paper Towels." Call him today. And be sure to watch "Father Knows Best" on CBS-TV.

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Scott Multifold Towels Scott Singlefold Towels ScotTissue



9:00 a.m. ... new girl



9:15 a.m. ... old hand



# This amazing automatic calculator - the Marchant Deci • Magic

... is the calculator *anyone* can learn to use, in minutes! You'll notice the benefits right away—less learning time... and the happiest calculator operators you've ever had!

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# In Research

## Man in Space Within Three Years Called For By Pentagon Timetable

The Air Force balloon flight to the "edge of the atmosphere" last week gave Roy W. Johnson, head of the Pentagon's Advanced Research Projects Agency, a chance to outline the over-all plan for U. S. space research.

The rocket industry promptly pricked up its ears, for Johnson's blueprint called for putting an airman into space within two or three years—much sooner than had been expected. Equally interesting to industry was the fact that Johnson seemed to be thinking in terms of a rapid-fire series of experiments with space capsules.

Johnson said that \$40-million has already been set aside for the work and that another \$25-million will be needed. The idea is to place the first human space traveler in a capsule, along the lines already suggested by several companies. For the first try, a 24-hr. trip—something like eight orbits around the earth—is the goal. But Johnson indicated all hands would be satisfied with a single orbit, if the passenger got back safely.

Observers—without benefit of official word—are betting that the capsule launching will be entrusted to the 5,000-mi. Atlas, which should be operational by 1960.

## Better Therapies Are Just Ahead, But Not Panaceas, Doctors Hear

News about the latest developments in medical research last week streamed out from the Clinical Congress of the American College of Surgeons, in Chicago. On the whole, the results looked good, on both the fundamental and the practical level. No one disease seemed headed for defeat this year, but therapy in a number of them is on the brink of major advance.

Cancer. Research in chemotherapy held center stage in cancer work. Eventually, it may be possible to "determine in advance which anti-cancer drug will work best in a patient by first testing his tumor's sensitivity to a number of them in a test tube," according to the Roswell Park Memorial Institute, in Buffalo. At the moment, the catch is that there aren't enough drugs (chemotherapeutic agents) available for the test to mean much.

The Roswell Park people add a further warning that most present anti-cancer agents are toxic and are ineffective against most tumors. They add that studies of animals and people seem to show that if a given drug doesn't actually curb a cancer it is likely to go the other way and stimulate its growth—by lowering the patient's resistance. Says Roswell's Dr. Tatsuhei Kondo, "One must conclude therefore, that until more nontoxic cancer chemotherapeutic agents are found, they must be used cautiously, lest more harm than good result."

Knitting fractures. The Hahnemann Medical College in Philadelphia reports two years of experimental successes with a new technique for joining the broken ends of bones. The trick is to fill the fracture with polyurethane, a substance used widely for padding in furniture and airplane parts. The polyurethane hardens within half an hour, binding the ends of bone together; eventually, the bloodstream absorbs the polyurethane without damage. Even in serious fractures, the patient needs no splint or cast after three days.

Permanent brain damage. Johns Hopkins reports that refrigeration can prevent permanent brain damage in cases where heart action has been stopped and then re-started. The damage has come because brain cells begin to die as soon as their supply of oxygen-bearing blood is cut off. Irreparable damage can be done within five minutes. Now, tests on animals—and just recently on humans—have shown that if the patient's body temperature is reduced to seven or eight degrees below normal, his brain cells can get by without oxygen for much longer. To accomplish the drop in temperature, the patient's body is packed in ice.

## Mobile Seismograph Gives Third Fix For Tracking, Measuring Earthquakes

The tracking of earthquake waves and other earth tremors should become a much more exact science with a mobile seismographic recorder developed by a geologist at the University of Michigan.

The mobile unit should provide the badly needed third position fix for determining the direction and surface velocity of earthquake waves, and the time differences between recurring waves. The existing number of fixed recording stations is far too small to permit accurate three-point fixes in many places.

The three-point fixes should help establish the angle at which earthquake waves reach the surface, and so assist in the prediction of the course and severity of earthquakes. It should also help the study of the thickness and composition of the earth's crust, a field where there is little first-hand knowledge.

## Repairs on Reactors Safely Speeded By Freezing Pipes For An Ice Shield

Speeding up the maintenance of atomic reactors, by an ingenious use of dry ice and alcohol, is being tested on the experimental boiling water reactor operated at the Argonne National Laboratory, Chicago University.

The problem is preventing the leakage of radioactive wastes when a part of the reactor has to be removed. Hitherto, the method has been to drain all water from the core and remove the fuel elements before starting the repairs. The whole process, plus reloading, takes up to six days.

The new system simply freezes the lower part of one of the control rod thimbles—the pipes leading to the control rod drive mechanism, which forms an ice dam that effectively prevents radioactive wastes from leaking out of the core. In this way, repairs can be completed within eight hours.

# A New Whirl for Helicopters



BRUSSELS Sabena Airlines ferried 80,000 passengers this season during the Brussels Fair (fairground terminal above), also serves 12 cities in four nations.



CHICAGO Helicopter from O'Hare Field to the Loop cuts 14-hr. limousine ride to a mere 11 min. The line also serves Midway Airport and nearby cities.

Gas turbines, more seating capacity make them economical.

Ever since 19 years ago when Igor Sikorsky flew the first helicopter developed in the Western Hemisphere, Americans have been talking grandly about the possibilities of the machine. In their fondest dreams, the helicopter will serve as an aerial bus or taxi, whisking travelers over the congestion of highways and city streets.

This dream has been slow to materialize. Not until five years ago did any substantial passenger service begin, and only four airlines in the world—three U.S. and one foreign—today offer helicopter flights over regular routes.

Yet the dream is persistent. Helicopter enthusiasts say its chances of becoming reality have never been better, because:

 Development of the gas turbine now makes it possible to build the giant helicopters that will carry big passenger loads at maximum economy. The ones that the airlines are flying today may be the biggest and last of the "little" helicopters.

• Arrival of the jet age in air transport will provide the passengers to fill the seats of the big new helibuses. People will soon fly across the continent in jets in half the time the best pistonengined liners take, and they'll be in no mood for the delays of surface travel from the airport to their offices and homes. Besides, the new jet liners will carry many more passengers per load—many more people to be ferried from downtown to airport.

• Breaking the Circle—Two years ago, officials at the Civil Aeronautics Administration agreed on a prediction that by 1970, helicopters should carry 5- to 7-million revenue passengers if their growth parallels that of fixed-wing planes. Despite the slow progress in rotary-wing service since then, CAA people stick by their earlier prediction.

Two factors will break the vicious circle in which the industry has been moving, the experts say: bigger and more economical helicopters, and greater passenger demand.

The last two years have been troublesome, both for the operators and for the manufacturers (BW-Oct.13'56, p188). Existing equipment is unprofitable to run-costing between 20e and 30e a seat-mile, compared with 3e a seat-mile for fixed-wing aircraft. Most airline veterans figure helicopters can't operate in the black until direct costs get down under 10e a seat-mile.

On the other hand, manufacturers



SHEET PROTECTORS Make this test. Join a sheet protector of "Mylar" to an ordinary sheet protector with "S" hooks or ordinary paper clips. Then snap! Even though it's much thinner, the sheet protector of "Mylar" remains intact, while the ordinary sheet pulls away at the ring holes.



REINFORCED SHEETS Extrathin
"Mylar" cuts bulk ... reinforced sheets
run smoothly through reproducing matchines without snagging . . "pull-out"
problems at ring holes are eliminated.



BOOK COVERS Jacket covers of "Mylar" last the life of the book. They're waterproof... resist moisture, grease, rough handling... help libraries cut replacement costs.

# Here's how DuPont Mylar® helps save space, cut replacement costs on stationery items

The amazing properties found in Du Pont's "Mylar"\* polyester film are now helping industry save space . . . reduce weight . . . cut replacement costs on a myriad of important stationery items.

For example, the life of an industrial job-ticket holder is usually limited by rough handling, moisture and grease in the shop. But holders made with tough, durable "Mylar" can withstand rough treatment over longer periods of time . . . greatly reducing replacement costs!

In the case of sheet protectors made with extra-thin "Mylar", up to 35%

more sheets can be put in a ring binder! This saves space and helps reduce weight in the office or salesman's kit. Thinner index card holders can help save valuable drawer space.

Durability, clarity, toughness and thinness—all these properties of "Mylar" can help you save valuable office space and cut replacement costs for dozens of stationery items. So be sure to specify "Mylar" when ordering from your supplier. For a list of items now made with "Mylar" and a demonstration sheet, write: E. I. du Pont de Nemours & Co. (Inc.), Rm.VI, Film Dept., Wilmington, Del.

\*Du Pont manufactures the base material "Mylar"—not finished stationery items.
"Mylar" is Du Pont's registered trademark for its polyester film.



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# Look what Riegel paper is doing:

- \* Precious moments in color
- \* Hi-Fi's pear-shaped tones
- \* Friendly bacteria
- \* Precious moments recorded on color photographic film are preserved in paper photomounts. Made of a special Riegel heat-seal-coated paper that is strong and rigid, and die-cuts cleanly.
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That's why James B. Lansing Sound chose a special Riegel insulating paper. Riegel's closely controlled strength, stability, moisture resistance and dielectric properties help preserve true pear-shaped tones.

\* Now you can un-clog drains with no splash or strain, thanks to Drain-Aid. It's a new bacteria-enzyme



formula, protected by Riegel's Pouchpak\*...a special pouch paper laminated to foil, then printed and polyethylene coated. A packaging idea here for your products? \*T.M. \* Paper made of glass or nylon... paper that holds water but lets air pass...paper you can't tear...these are also examples of Riegel's ability to make paper for almost any industrial need. Whenever you have a paper problem, write to Riegel Paper Corp., P.O. Box 250, New York 16.





CANDIDATE FOR SHIP X, the medium-sized helicopter of the future for city-suburban travel, is the Vertol 107. In a commercial version, it will carry around 25 passengers.

haven't been eager to spend money to design better helicopters specifically for the transport market. Until now, they haven't been able to see the demand that would justify such an outlay—the world's four helicopter lines altegether fly only a couple of dozen aircraft. Now manufacturers' doubts seem to be clearing up—on the eve of jet transport service, with air travelers already griping with increased bitterness about highway traffic and long hauls between airport and downtown.

### I. The Four Operators

The three certificated helicopter lines in the U.S. are all concerned primarily with shuttling passengers to and from the airports. New York Airways, Inc., flies between midtown Manhattan and the three New York City airports—LaGuardia, Newark, and Idlewild; it also makes some stops in the New York and Connecticut suburbs. Chicago Helicopter Airways, Inc., flies between the Loop and O'Hare and Midway airfields; it also serves Winnetka, a plush Chicago suburb, and Gary, Ind. Los Angeles Airways links the city airport with 17 communities in four countries.

The only other major helicopter operator is Sabena Airlines of Belgium, which supplements its foreign routes with helicopter service to 12 cities in four countries (BW-Nov.13'54,p121). From Brussels, its home base, the helicopter routes fan out to Paris, Bonn, Rotterdam, and other cities.

Sabena not only uses copters to feed its transatlantic route from Brussels but has also built up a substantial trade in flying businessmen from one city to another.

· Their Equipment-All four lines use

standard U.S. built helicopters that have been adapted from military designs: 7-passenger Sikorsky S-55s, 12passenger Sikorsky S-58s, and 15passenger, twin-engined Vertol T-44s.

Operating costs on these craft range from 20¢ to 30¢ a seat-mile. While helicopter fares are not cheap, considered on a per-mile basis, they don't come even close to covering costs. So the government has been picking up most of the tab, in the U.S. at least.

Last year, CAB provided \$4.1-million in subsidies—more than 70% of the total operating revenue of the three U.S. lines. Sabena, too, runs up losses on its helicopter service, but it writes them off as a generator of new business for the main line and as a source of publicity.

• Shortcomings—Limitations of current equipment have kept operating costs high and, worse yet for a growing industry, have dampened plans to expand routes and service.

While it was operating S-58s, for example, New York Airways (which flies T-44s now) found its copters' lifting power cut sharply in hot weather, so it couldn't even fill all its seats with paving customers.

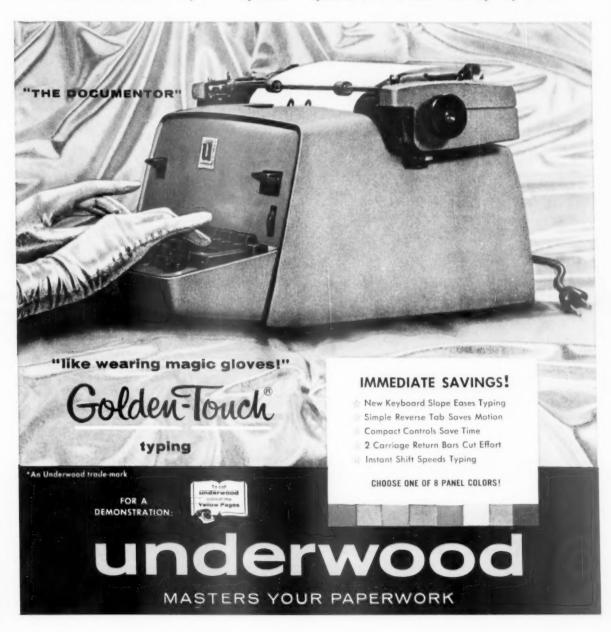
The S-58s often had to take off with only their mail load and two or three passengers instead of a dozen. And Los Angeles Airways, by city regulation, has not been allowed to serve downtown Los Angeles until it has two-engine equipment, for safety in flying over built-up areas.

In all the city operations, helicopters have been required to fly at such altitudes and over such routes that if the single engine went dead, the pilot would be able to glide to an emergency

# New "Floating Keyboard" helps stop typing strain!

Much typing strain comes from holding hands up at the keys. This *Floating Keyboard* is sloped to reduce fatigue. It keeps keys low, brings them close, centers controls. There's less hand-travel than on any other keyboard.

You choose your own type style with the new Golden-Touch DOCUMENTOR.\* Keys are cupshaped for easier *electric* touch. Impression control insures print-perfect copy—sharp carbons. Symbols (+=!°) add versatility. Try it soon!





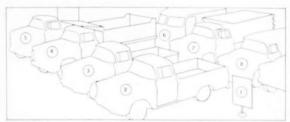
# Chevrolet Task-Force 59 arrives!

For '59, Chevy's come up with the handsomest, hardiest fleet of trucks that ever shouldered a load. They bring you new might, new muscle, new engineered-for-efficiency features. They're ready to tackle the toughest jobs!

You've got more pickups than ever to choose from—clean-lined Fleetside models and a variety of Stepsides. You'll see spacious Step-Vans complete with walk-in bodies. Four-wheel drive in pickups, panels, stakes and cab-and-chassis models. Medium-duty jobs with a cab-to-axle dimension specially designed for trailer application. Series 50H and 60H middleweights outfitted to handle heavier loads at lower cost. A whole lineup of heavy-duty haulers including tougher-than-ever bigtonnage tandems. And—coming soon—the sportiest load carrier that ever took to the road, Chevy's all-new El Camino! See them soon and get one saving on your job right away! . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

NEW MIGHT... NEW MODELS ... NEW MONEY-SAVING





- 1 El Camino—coming—the most stylish worker on wheels!
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- 3 Hard-working Stepside—the pickup most famous for economy!
- ^ Series 100 tandem—shown with special dump body.
- 5 Series 90 cab-and-chassis model. V8 power is standard.
- 6 Series 30 Step-Van. Available with 8', 10' and 12' bodies.
- 7 Series 60 stake model. Heavyduty options available.
- 8 Series 31 panel—lots of load space plus low operating costs!

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Task-Force 59 models combine new developments with the proved advantages that have made Chevrolet America's No. 1 truck year after year. Never before have trucks brought such ironclad assurance of reliability and economy to your hauling job.

There's a new high-economy Thriftmaster 6 to stretch the distance between gas stops; standard in all Series 30 and 40 light-duty models. A completely new Workmaster Special V8 with more pulling power for Series 70 and 80 truck models—teamed with either fully automatic Powermatic, or a new close-ratio 5-speed SynchroMesh transmission—as an extracost option.

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Your Chevrolet dealer will fill in the rest, from new colors to special equipment available. He'll show you complete specifications for the better-than-ever '59 editions of America's first-choice truck.

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TIMEPOST at Sabena's Brussels heliport shows flying time, not mileage.

landing place. These routes have rarely been the shortest or the most economical.

#### II. Growing Demand

With all these drawbacks, helicopter passenger demand has grown. Last year, the three U.S. lines flew 153,000 passengers; this year, the figure will approach 250,000. Sabena ferried 80,000 passengers this season to the Brussels Fair alone and may wind up the year with a total of 150,000.

Most helicopter passengers are businessmen, pressed for time and traveling on expense accounts. For example, it takes 11 minutes and \$6 to fly a Chicago Helicopter Airways craft from the Chicago Loop to O'Hare Field, 17 miles away. An airport limousine would cost only \$2.25 but might take as much as 80 minutes during the rush hour.

"In a few months," says C. E. Liske of CHA, "a passenger on a jet transport from New York will arrive at O'Hare in 90 minutes. Who wants to spend another 75 min. getting downtown?"

Sabena has also found that tourists like the whirlybirds, both for the saving of time between cities and for the low-level bird's-eye view they get of the countryside.

#### III. New Equipment

To meet the growing demand, the four lines, and others that may enter the field as the market expands, count on new big helicopters powered with gas turbines. The engines, originally developed for the military, are beginning to find their way into civilian use.

R. L. Cummings, Jr., president of New York Airways, declares that har-



SABENA'S Jules Naome feels Ship Y is the key to international helibus service.

nessing gas turbine power for helicopters is "even more important to the evolution of helicopter transport than the advent of jet power to the fixedwing transportation industry."

• All Sorts of Gains—Used in pairs, the new engines will provide the extra range and safety that whirlybird operators have been hankering for. They'll have the power to lift 25- or 50-seat helibuses, with less fuel consumption than the piston engines in today's "small" craft. They are virtually free from the vibration of piston engines, which gives present equipment a severe pounding. They are lighter, take up less room, and are far easier to service.

• Ship X and Ship Y—The gas turbines will show up in two basic types of helicopters, which the International Air Transport Assn. has dubbed Ship X and Ship Y.

Ship X is a 20- to 30-passenger craft for metropolitan travel—from airports to downtown, from suburbs to cities. It will have a cruising speed of around 125 mph., a direct operating cost under 10e a seat-mile. In this category, Sikorsky is grooming a commercial version of its military S-61; Los Angeles Airways has already ordered five of these. Vertol's 107 (picture, page 78), now being built for the Army, also meets Ship X specifications. So do several other U.S., British, and French designs.

Ship Y is defined as a bus-size helicopter to carry 40 or 50 passengers at a cruising speed of around 150 mph. on short intercity routes, such as New York-Phildelphia, Chicago-Milwaukee, Baltimore-Washington. Its ability to land and take off in mid-city would make it faster than a jet plus airport bus.

There are indications that Vertol will

# Plant trespassers a problem?



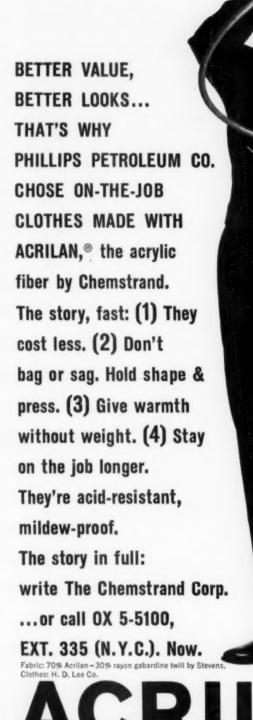
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adapt its military H-16 for such use, and Sikorsky and others are expected to come forth with prototypes. Fairey Aviation Co., Ltd., in England is flight testing its Rotodyne, a type of convertiplane (BW—May31'58,p94). This craft, for which U.S. manufacturing and sales rights have been acquired by Kaman Aircraft Corp. (BW—Aug.30'58,p26), has a helicopter rotor plus conventional propeller. Its passenger load of 48 puts it into the general class of Ship Y.

Such a helibus has great appeal, especially for an intercity helicopter line such as Sabena, which could then open up a Brussels-London route.

• But When?—Aviation prophets say Ship X will make its commercial debut by late 1960, Ship Y generally a couple of years later. The first models delivered will replace present craft, but they have so many more seats and fly so much faster that this replacement alone will just about double the passenger capacity. With five of the Ship X type, New York Airways estimates it could carry 1-million passengers a year.

The new ships will also permit new routes to be opened. NYA plans to extend service farther into the suburbs, also to use five new heliports in the New York City area: at Newark, Brooklyn, Staten Island, the U.N. building neighborhood, and the Wall Street district.

With multi-engine aircraft, Los Angeles Airways can begin serving the downtown area and expand routes to Santa Barbara and other more distant points. Chicago Helicopter Airways will move farther out in the 60-mi. radius it is permitted to serve. Sabena will add London to its helicopter network, and possibly cities in Germany.

• More on Ground Floor—If the new gas turbine helicopters succeed in turning red ink into black in the operating accounts, more lines are sure to get into the business. CAB already has about 70 applications for route certificates, including such areas as Ft. Worth-Dallas, Cleveland, St. Louis, San Francisco, and New Orleans.

CAB has had a freeze on the granting of new requests for routes, chiefly because of the prospect of heavy subsidies for each new operator. With the coming of helicopters that could pay for themselves, this freeze should thaw.

There's interest abroad, too. British European Airways is closely watching new developments. In France, the nation's largest bus line—Societe General des Transports—has just started experimental helicopter flights on its Caen-LeHavre route, to see if it can make double use of its bus terminals and personnel. The Russians say that by 1965 large Russian cities will be served by a fleet of 6,000 public transport helicopters. END



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able source of quality carbon steel to tank and barge builders, boiler and pipe makers, and other fabricators.

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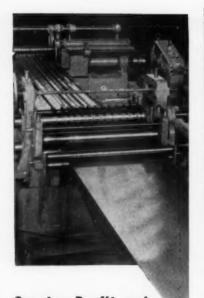
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# Co-ops Gain on Forwarders

ICC-regulated freight forwarders are up in arms over the way non-regulated cooperatives are horning in on the less-than-carload shipping business.

Late last December, A. D. Welsh, president of Welsh Baby Carriage Co., summoned a number of St. Louis freight-traffic people. The point of the meeting: How could his company ship less-than-carload freight at carload-lot rates?

That conference sired Associated Shippers, a cooperative that for a fee consolidates member-shippers' less-than-carload (Lc.l.) freight at a warehouse rented by members, then ships it at the cheaper carload rates. In business only since January, Associated Shippers already has 39 member companies, and holds applications from 20 more. In addition, it is getting inquiries for affiliation from cooperatives in other cities.

• Opposition—Associated Shippers is only one example of how shippers' cooperatives are springing up all around the country. The trend is drawing fire from freight forwarders, who are alarmed at the way the co-op shippers are cutting into their business; but so far, forwarders have been powerless to stop the growth of the co-ops.

Cooperative shipping got under way in 1942, when Congress excluded co-op shippers from Interstate Commerce Commission regulation. Since then—spurred by a shippers' revolt against high transportation costs—about 100 co-ops have been formed.

• How It Works—ICC-regulated freight forwarders act as agents for shippers with less-than-carload freight. They arrange for pickup, consolidate l.c.l. into carloads, buy transportation at a carload rate from carriers, and arrange for delivery of shipments at their destination. They make their profit from the difference between the l.c.l. rates they charge shippers and the carload rates they pay carriers.

The shippers' cooperative operates in the same physical way, with the difference that member-shippers get the benefit of the carload rates themselves, Savings to members run as high as 50%.

• Toll on Forwarders—No one knows just how much freight has been diverted from forwarders by the co-ops, since the cooperatives report only to their members or directors. But forwarders complain bitterly that the diversion is high, and quote ICC figures on their own falling tonnages and diminishing nets.

In 1957, for instance, the tonnages

of the 60 forwarders reporting to ICC fell to 4.3-million tons—from 4.5-million tons in 1956. In the same period, the number of shipments dropped from 25.4-million to 24.8-million. Net income for the 60 companies rose from \$3.6-million to \$4.2-million, but only because of a rise in rates. (In each year, two forwarders—Lifshultz Fast Freight and Western Carloading Co.—netted almost half these totals.) Only five of the forwarders reported a net loss for 1956, but 21 showed red ink last year. In the first quarter of 1958, the number moved up to 31.

 Potent Competition—Of course, the sagging fortunes of forwarders are not entirely due to the rise of cooperative associations. Trucking takes a big toll, and the recession has cut down shipping generally. In addition, manufacturers are fighting rising transportation costs with other devices such as shipping containers and piggyback, both of which reduce handling.

But forwarders worry more about co-ops. Cooperatives thrive along the most lush corridors of shipping—the very ones where forwarders find their best profits. As the co-ops siphon off the big and relatively easy-to-move cargo between such points as St. Louis and New York, they leave the less profitable out-of-the-way shipments to the forwarders.

Co-op Diversification—When Congress excluded shippers' associations from ICC regulation, co-op shippers were relatively few, and confined mostly to companies in a single industry. At first, the associations were formed by the shippers, who hired a traffic manager to consolidate their l.c.l. shipments and to buy carload transportation. As nonprofit groups, the co-ops were controlled by the shippers, and were organized solely to save money.

Soon another type appeared, differing in only one way: It was organized by consignees—usually department stores located in the same city—that bought from common manufacturing centers. Since then, a third type—organized and operated by a group or an individual—has come on the scene. Physically, it moves shippers' freight in the same way that forwarders and cooperatives do. As agent of the shipper, it rents facilities and buys transportation. But it is organized by outside entrepreneurs, and shipper-customers have little or no voice in the operation. Shippers pay

# NEW WEIGHTS NEW SPEEDS NEW EQUIPMENT DESIGNS RAISE HORSEPOWER NEEDS

Matched Power by Cummins is the answer to new truck legislation permitting heavier weights and longer lengths—greater speeds.

Matched Power earns you the most profit because you buy exactly the power you need!

Cummins Diesels...over 20 models, ranging from 110 to 335 h.p....match the exact power you need with new load and speed requirements to earn the <u>most</u> profit!

Five years ago, 42,000 lbs, was the practical legal limit in many areas. The norm today is 60,000 lbs. for 4 wheel tractors and 72,000 lbs. for 6 wheelers! Top speeds then were between 40 and 45 m.p.h. Today speeds up to 60 m.p.h. are permitted on express highways! Since 1953, legal lengths have been increased as much as 10 feet in many states!

Horsepower needs have changed too. When you buy your new rig, consider these facts:

First, a 10% increase in weight requires a 6% increase in horsepower!

Second, a 10% increase in cruising speed requires a 20% increase in horsepower!

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That's why it's vital to specify the power that

matches the individual characteristics of your operation. Cummins is better equipped to do this job than any other diesel manufacturer. From express service to short haul and city pick-up operations, you'll find the right power, optimum weight, top fuel economy, lowest maintenance cost, greatest availability in an engine from the Cummins Matched Power family.

> Matched Power chart on the next page gives specific models for the most popular applications. See your Cummins Distributor or truck representative for individual recommendations. Ask them for a copy of "Evaluating Diesel Power for Motor Trucks," or write Cummins Engine Company. Columbus, Indiana





**SELECT YOUR RIG** 



## MATCH YOUR POWER\*

unit type	gross cargo weights	top speed desired**	maximum required horsepower	general service models	lightweight models
	7. 3 6.9	45 m.p.h.	110	JF-6-B	JF-6-B
	35,000 lbs. to	50 m.p.h.	132	JN-6-B	JN-6-B
4 wheel tractor, 2 wheel trailer	42,000 lbs.	55 m.p.h.	160	JS-6-B, JNS-6-B	JS-6-B, JNS-6
		50 m.p.h.	166	NH-180	JT-6-B, NT-1
	55,000 lbs. to	55 m.p.h.	195	NH-180†, NH-195	NH180†, NT-2
4 wheel tractor, 4 wheel volume van semi-trailer	60,000 lbs.	60 m.p.h.	230	NH-220	NH-220
h		50 m.p.h.	194	NH-195	NT-200
	64,000 lbs to	55 m.p.h.	227	NH-220	NH-220
6 wheel tractor, 4 wheel volume van semi-trailer	72,000 lbs.	60 m.p.h.	262	NTO-6-B	NTO-6-B
		50 m.p.h.	204	NH-195	NT-200
THE THE VENT	68,000 lbs.	55 m.p.h.	238	NT-6-B	NT-6-B
Truck, full trailer or tractor, semi and full trailer	76,800 lbs.	60 m.p.h.	275	NTO-6-B	NTO-6-B
		50 m.p.h.	142	JS-6-B	JS-6-B
- F	55,000 lbs. to 60,000 lbs.	55 m.p.h.	163	NH-180	JNS-6-B, NT-18
4 wheel tractor, 4 wheel tank trailer		60 m.p.h.	187	NH-180	NT-200
	TE EUR	50 m.p.h.	171	NH-180	JT-6-B, NT-18
60-	64,000 lbs. to	55 m.p.h.	195	NH-195 .	NT-200
6 wheel tractor, 4 wheel tank trailer	72,000 lbs.	60 m.p.h.	220	NH-220	NH-220
	68,000 lbs. to 76,800 lbs.	50 m.p.h.	180	NH-180	NT-180
30 3 30 6		55 m.p.h.	206	NH-220	NT-200
Truck, full tank trailer or tractor, semi and full tank trailer		60 m.p.h.	234	NT-6-B	NT-6-B

<sup>\*</sup>These recommendations allow for horsepower loss to fan, accessories and gearing. Further, it is assumed tractors will be geared to operate at these speeds over level terrain.

<sup>\*\*</sup>Normal cruising at 5 m.p.h. less than top speed. †Loads of 55,000 lbs. G.C.W. at 55 m.p.h. require only 180 h.p. models.

# MATCHED POWER...

# provides the most profitable diesel for any application!

LOW COST MILES

With Cummins, Common Carriers can expect over 2¢ a mile fuel and maintenance savings over gasoline. These savings result from open-type combustion chambers, replaceable wet-type liners, improved breathing and the simple, accurate PT fuel system.

RELIABILITY

Cummins features, like the heavy-duty crankshaft and the Cummins designed cylinder block, help provide that extra measure of diesel reliability *Contract Carriers* must have for more profit.

SERVICE

More than 400 Cummins service points throughout the United States and Canada mean *Private Carriers* are assured of service availability wherever and whenever they need it.

MINIMUM DOWNTIME

Such features as the exclusive Cummins PT fuel system, a gear-driven compressor and unit replacements protect *Lease Operators* from costly downtime. Also, the absence of an electric ignition system required by gasoline engines eliminates the cause of 10% of road failures.

LOW MAINTENANCE

This is a big factor in *Rental Operations* where the smallest saving in maintenance time adds up to greater profits, Cummins Diesels require about 25% less maintenance hours than gasoline engines.

LIGHTWEIGHT

There is an entire series of Cummins models that provide lightweight, compact power. *Tank Operators* and *Movers* using them for in-city, over-the-road hauls will earn the most profit while maintaining maximum payload efficiency.

SHORT-HAUL ECONOMY

Cummins high efficiency in start-stop, part load operations, compared to gasoline, means lower operating costs for City Pick-up and Delivery, Contractors, Redi-Mix Operators, Sand and Gravel Suppliers and Municipalities. By the hour or by the mile, Cummins Diesels are more profitable than gasoline engines.

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Cummins Diesels power more new trucks than all other diesels combined!

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EXPORT — CUMMINS DIESEL EXPORT CORPORATION — COLUMBUS, INDIANA, U. S. A. — CABLE: CUMDIEX
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# "...ICC would like to win a clear-cut court decision that would let it crack down on questionable co-ops . . ."

CO-OPS starts on p. 86

small annual dues and frequently a service charge of 25¢ per cwt.

• Battleground—It is on these points—the service charge and who controls these co-ops—that forwarders are training their guns. No forwarder objects, at least publicly, to the first or second type of association, because these are clearly what Congress had in mind when it excluded shipper associations from ICC regulation. The third type, however, is branded "illegitimate" by forwarders. They charge that control of a cooperative by someone other than the shipper-members makes the association a forwarder subject to ICC regulation.

The cooperatives, in defense, fire back salvos against forwarders. One Texas co-op accuses them of being parasites, doesn't believe ICC reports that forwarders' profits and tonnages are declining: "They have ways of concealing profits. . ." United Shippers, Inc., a St. Louis co-op that claims to save its 100 members an average of \$1.50 to \$2 per cwt under l.c.l. rates, says, "Forwarders just haven't kept pace with the times . . they got into business by performing service that the railroads should have done in the first place. . . For many manufacturers the co-op shipper operation is the salvation of many distant markets."

On the other hand, forwarders scoff

On the other hand, forwarders scoff at the report that co-ops with many members were organized or are being operated by shippers. Their reasoning: If a number of shippers, say, 8 or 10, band together to ship at carload rates, they have achieved their purpose. What is the point of adding tens or even hundreds of members unless a co-op is being managed by independents who are making a business out of it with service charges? According to one forwarder: "They're not soliciting memberships at all. They're soliciting freight, and this makes them forwarders."

· Rebuttal-Co-ops retort that they don't solicit memberships, much less freight-and to a degree they're right, since manufacturers in many places are clamoring to get into a co-op. This, however, makes it relatively easy for an experienced traffic manager-in one case the former employee of a forwarder -to organize a co-op with as little as two other officers under the nonprofit laws of a state. Like a forwarder, the co-op buys no equipment, only the services of pickup trucks and common carriers. So, with a charter and a little money, it is relatively easy for a traffic expert to acquire customers.

• ICC's Dilemma—Caught between all

this crossfire is ICC, which has the job of ferreting out evaders. ICC's problem is that it has no clear-cut rules for establishing what is a bona fide shipper association.

There are a "lot of rather suspect" shipper association operations going on now, ICC says, but proving anything is another matter. According to the commission, a true shipper association should be formed, owned, and operated by a group of shippers, with the member-shippers exercising full control over the operation.

An example of how hard it is to prove charges turned up years ago when ICC held that Pacific Coast Wholesalers Assn. was not a legitimate shipper association. A lower court and the Supreme Court both reversed the commission's ruling, and upheld the regulation-exempt status of the organization. Today, Pacific Wholesalers has about 50 members, and with its affiliate, California Manufacturers Freight Assn., handles 40,000 tons of freight a year.

• Cases Pending—ICC would like to win a clear-cut court decision that would give it power to crack down on questionable operations. Currently, it has pending a half-dozen cases in which there is a question on status. However, most of these cases won't get to court. Once ICC starts probing, an organization usually closes down if there is a good chance the commission can force it under regulation. In some cases, ICC says, it may reform into a true shipper organization.

The scurry to escape government regulation is traditional, but for co-op members, ICC regulation would also mean shipping costs at least as high as forwarders'. Regulation would also mean that co-ops would have to file with ICC reports on rates and on insurance on shipments.

· At Odds-To halt this fire between regulated freight forwarders and shipper associations, "corrective legislation" is needed, says Giles Morrow, president of the Freight Forwarders Institute. But this is not easy, Morrow admits. In fact, "the forwarders themselves haven't even been able to draft legislation that is acceptable to all members. . , ." Bills have been introduced in Congress, but none has satisfied anyone -ICC, forwarders, or co-ops. Some forwarders tried to fight associations by matching rates, but this only brought down the wrath of other forwarders. One solution to it all, says Morrow, would be a court decision that "laid down firm lines that the ICC could get its teeth in." END For a pressure-tight seal that locks and disengages quickly:

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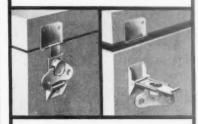


Twelve LINK-LOCK fasteners insure a pressure-tight seal in this gasketed container for electronic equipment.

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Features like these make the LINK-LOCK ideal for use on military cases produced to rigid specifications as well as on inexpensive commercial containers:

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Half-turn applies high closing pressure, counter-turn disengages for opening.



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# Cutting Auto License Fraud

California is using a tamper-proof photographic system for putting the driver's image on his license—a move enthusiastically welcomed by the state's merchants.

An automobile driver's license incorporating a photographic image of the driver on the same paper stock that details his vital statistics made its bow in California this week.

The debut, at the Los Angeles branch office of the State Dept. of Motor Vehicles, drew an audience in which law enforcement officials were far outnumbered by men from a wide segment of the business community.

To supermarkets, hotels, banks, de-partment stores, liquor stores, taverns, and the whole range of retail outlets, the photo-bearing license looks like something pretty close to ironclad insurance against the petty swindler who cashes phony or stolen checks and the minor who tries to buy liquor.

State Sen. Randolph Collier, author of the legislation that made possible this first major change in the license in 20 years, said that pressure for it by merchants and their trade associations surpassed that of enforcement agencies.

A law passed this year in Michigan also requires drivers' photos to appear on their licenses, but the new system has not yet gone into effect. Utah is investigating a photo license but plans no change before 1961, if then. Motor vehicle administrators of other states are watching the California development.

· Favorite Identification-Despite the popularity and wide acceptance of credit cards-oil companies, hotels, Diners' Club, American Express, airlines, and the like-the driver's license with all its limitations remains the standard of identification. It's a safe bet that a motorist flashes his license more often for simple identification than for evidence of his permission to drive. His picture on it will facilitate its acceptance and will guard against its misuse if he loses it

Paul Mason, State Director of Motor Vehicles, announced at the Los Angeles ceremonies that 200 of the special cameras to be used in making the licenses will be installed in the next few months in his department's field

offices around the state.

All existing four-year licenses will be replaced by the new form as owners renew them, at the rate of more than 2-million a year, at no increase in the \$3 fee. Drivers without moving violations on their record will get a five-year renewal, others two-year. The new licenses will be timed to expire on the driver's birthday.

· Contract Winner-The job of pro-

ducing the licenses was awarded by three-year contract to Royal Blue Reprographics. Inc., a San Francisco company whose original blueprint business has mushroomed over the past 14 vears into a broad spectrum of reproduction services ranging to microphotography and color lithography.

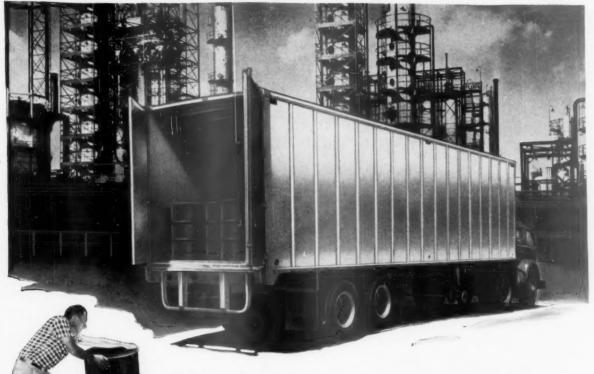
Royal Blue's low bid of 4.49¢ per license was just under half that of the next bidder at 9e in a field of nine that ranged up to 28.7¢. It was so low that it took two months to find an insurance company that would supply the required \$250,000 performance bond. Newell Dodge, owner of the company, was able to convince the state and the insurer that his price included a substantial profit.

For 4.49¢ per unit, Dodge must build and install the 200 special cameras designed by his engineering department, train state personnel to operate them, supply all the film and paper, and do all the processing and printing of licenses. He is planning to build a central processing laboratory near the Dept. of Motor Vehicles office in

Sacramento. • Technical Triumph-Dodge's solution of the problem presented by the state was something of a technical triumph. The license had to be as tamper-proof, even laundry-proof, as human ingenuity could make it. This ruled out a detachable photo; the picture had to be printed on the same sheet that carries the name, description, optional thumbprint, and other details about the driver. · How It's Done-With the camera and process that Royal Blue developed, the whole work is captured on a single frame of 35-mm. plus-X film measuring

about 1 in. by 11 in. When the applicant steps before the camera, his application is inserted in a slot in the camera. One click of the shutter puts his latent image on one-half of the film frame and a microphotograph of the application on the other half. After the film is developed, the portrait is contact-printed and the main body of the license is projection-printed on the same piece of sensitized paper. At the same time, the printing machine automatically screens out the thumbprint and superimposes the state seal and other detail by projection. On a mass-production basis, this

involves not only some tricky optics but also some fine technical compromises in the resolution of the diametrically different contrast requirement,



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to ship a barrel of anything

"HIRE A TRUCK OR TRAILER."

Repetition of these bywords has revolutionized the face of industrial America in the last three-quarters of a century. Whatever anyone in any business has had to ship during this productive period, from any place to anywhere in any quantity at any time, Trucks and Trailers have done it at the desired moment with all necessary speed.

This complete mobility and instantaneous readiness of Motor Transport is the secret of its unique value to all manufacturers, the cause of its spectacular growth as a modern freight system. The easy, convenient, immediate way to ship a barrel of anything—

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The barrel is but one of many types of modern shipping containers to which the spacious present-day Trailer is fully adaptable. Manufacturers whose products are best packaged in crates, cartons, bags, tubes, or drums, or shipped on racks, hooks, or pallets, can all "hire a Truck or Trailer" that is scientifically designed for rapid, efficient distribution.

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That Serve The People



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## Make one product do the job of two with Ceco's Electro-Channel Steel Joists

When you look at a completed building, you can't see under the floor. But you should be vitally interested in what's there. Especially if you can find a new product that does two jobs and cuts costs. There is such a product-Ceco's Electro-Channel Steel Joist. It supports the floor and carries the wiring for your telephone, intercom and power outlets. You save 50% in duct cost. You get "quality underfloor electrification," which allows you to move desks and business machines anywhere on the floor without costly building

changes. Ask your architect to tell you more about doubleduty E/C Joists, Ceco Steel Products Corporation. Sales offices, warehouses and fabricating plants in principal cities. General offices: 5601 West 26th St., Chicago 50, Illinois. Look at this picture of Coco E/C Steel Joist.

You won't see it in your completed building. But here's how it works two ways for you: (1) Supplies light weight but rigid steel floor framing: (2) Affords built-in underfloor raceways for concealed wiring for business machines and communication equipment, Listed by Underwriters' Laboratories.

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This is the floor framing for a district office of a major petroleum company. Two wide ribbons in center (and at upper sides) are E/C Joists. Standard Open-Web Steel Joists are also evident. Two header ducts, horizontal in toreground, feed wires into E/C Joists. Result: Electrical flexibility, wide open office space-both at savings, both safe and reliable.

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Please	send Mar	tual 3011 e	explaining	Ceco E	lectro-Channe
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in both film and paper, for the half-tone portrait and the high-contrast blackand-white printed matter.

Voluntary thumbprints on existing licenses have been of limited value for identification because the white-onblack photographic process now employed gives a negative image of the whorls. The new license will not carry the thumbprint, although it will be available on the application and on the film for any positive identification that is required. Royal Blue was the only one of the

nine bidders to come up with a technique for preserving the thumbprint. • Fast Rise-This kind of ingenuity has been useful to Dodge in increasing Royal Blue's versatility in reproduction services and building sales to \$2-million a year. From a little two-man blueprinting plant that he started in Madison, Wis., in 1937, he has expanded into a complex that offers 64 different kinds of reproduction. In addition, his company sells and repairs engineering instruments, coats and sells blueprinting and diazo papers, and operates an engineering subsidiary that designs and builds specialty reproduction equip-

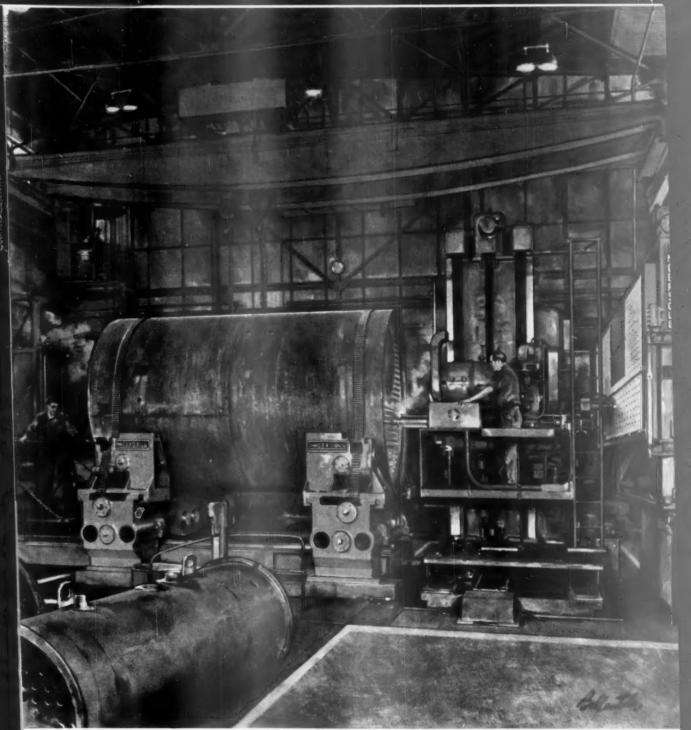
During World War II. Dodge conceived a job-site service that has turned out to be a big sales builder. Where a major construction job is under way, he offers to set up a printing plant to speed up delivery of blueprints and other reproductions of engineering drawings at competitive prices.

In this fashion he handled the printing for the Alaska Highway and all its collateral facilities, the Trans-Canada pipeline, and some of the Atomic Energy Commission's construction at Idaho Falls, Idaho. His biggest jobsite projects, though, were the Anglo-Iranian Oil refinery at Aden involving some 400,000 reproductions of drawings and reports, 25,000 employee-identification badges, and mountains of movie and still films for progress reports; and a plant in Madrid, still operating, that supplies all reproductions that is needed by the Navy Bureau of Yards & Docks for construction of our Spanish air bases.

• Basic Technique—The job-site service was facilitated five years ago by Dodge's development of a technique for microfilming engineering drawings without sacrifice of scale. Where others had used 35-mm. or 70-mm. film and produced images too small to blow up in true proportions, Dodge built a camera to accept 105-mm. film (about 4 in. These films can be contactprinted for handy reference purposes or blown up to half or full scale.

Royal Blue has two blueprinting plants and a color lithograph plant in the San Francisco area, two more plants

in the Los Angeles area. END



An Economical Answer to Laying Out and Machining a Complex Pattern of Holes.

The traditional boiler shop atmosphere, including stout muscles, dirt floor and a "chaw" of tobacco, has been changed to that of a modern production line plant by this specially designed Ingersoll, Quality of workmanship has reached a point never thought possible. In five years, this photoelectrically controlled machine has trepanned and chamfered the flue holes and processed the flues in both ends of thousands of boilers.

The machine and a three man crew do the work which 25 men did before. Productivity guaranteed by Ingersoll is being exceeded by 25%.

... INGERSOLL

MILLING MACHINE COMPANY

ROCKFORD, ILLINOIS

Ingersoil designed and built this special machine and the 180 indexing fixture for the Cleaver-Brooks Co., Milwaukee, Wisc.

Four photoelectric "eyes", which respond to variations in light reflected from the markings on the templates, control the movements of the machine's housing, head and spindle,



On the Massachusetts and Maine Turnpikes, internally-lighted PLEXIGLAS pole signs 14 feet in size, one of the largest productiontype signs ever built, reproduces the Cities Service Company trademark. PLEXIGLAS signs are also used on station pylons.

# Day and Night

you build more sales with

# PLEXIGLAS



High-speed highway travel is a real test of the legibility and eye-catching appearance of a sign. That's why every major oil company . . . and hundreds of leading firms in other fields . . . depend on dependable, gleaming  $P_{\rm LEXIGLAS}^*$  acrylic plastic for signs.

Day and night, signs made of PLEXIGLAS build more sales for big and small companies. Complete luminosity from internal lighting takes over at dusk, adding to the signs' colorful appearance and stopping power. Trademark-reproduction signs are accurate in PLEXIGLAS. In addition, this time-tested outdoor plastic resists breakage and weathering . . . keeps maintenance costs way down.

Sales go up when a Plexiglas sign goes up. Write for literature, color samples and the names of sign companies who can work with you to develop a Plexiglas sign program.

Send for this new full color brochure, "PLEXIGLAS for SIGNS". It tells how PLEXIGLAS has brought about new concepts of sign appearance and performance.





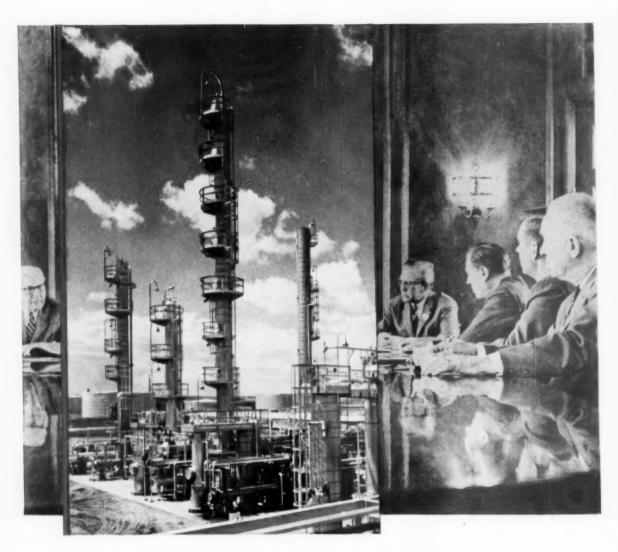
Chemicals for Industry

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# Pritchard applies automatic data logging with, above all, GOOD FINANCIAL DESIGN

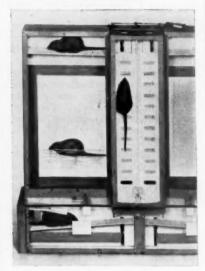
Socony's new 6000 bbl/day catalytic reforming unit at Casper, Wyoming might have been just another refinery addition—except for one vital difference. Along with the usual vessels and piping. J. F. Pritchard & Co., engineers and builders of the unit, provided a complete data logging and scanning system to monitor processes. This centralized automatic system supplements manual supervision and contributes to more efficient operation. The end result is lower operating costs and more profitable refinery operation.

The construction of this ultra-modern refining unit is an example of how Pritchard looks beyond the obvious to engineer and build plants with good financial design — the "extra" that gives Pritchard clients maximum return on capital.

Pritchard's experience in petroleum ranges from the design, engineering and construction of individual processing units to complete refineries. Pritchard also serves the oil field processing industry with facilities for operations such as sulphur removal and recovery, natural gas dehydration and pressure maintenance. If you are considering new construction in these fields, ask Pritchard to show you how good financial design can work for you.



### **NEW PRODUCTS**



# New Mousetrap Drowns Them-102 at a Clip

If Emerson was right, there's a wellbeaten path to the door of the Self-Sett Mousetrap Co., Cleveland. It developed the trap in the picture, which it claims can catch 102 mice with one setting. Fate of the mice: death by drowning, eliminating the need for

poison or electricity.

The trap works this way: A mouse is enticed into it by the odor of food (bottom left). He heads for the center of the trap, where the food is locatedbut it's in a chamber he can't get at. He is then attracted by a pinhole of light atop the ladder (center), and climbs the ladder where another pinhole of light draws him to the left. When he walks out on the ramp toward the light, his weight tips the ramp sideways and drops him into the tank, where he drowns in two and a half quarts of water. The trap door at the entrance closes when the mouse walks up to the ladder, setting up the trap for the next mouse.

It's a double trap, with the same arrangement to the right of the ladder as is shown in the picture to the left. It's made of rust-proof steel to keep the balanced parts working freely. It measures 15½ x 15 in. and weighs 12 lb.

All you have to do is fill the water chamber, insert the bait in its tray, and press buttons to open both doors. The trap can be disassembled in five seconds without touching any part touched by mice. It's intended for use in grain elevators, restaurants, warehouses, food processing and meat packing plants, stores, farms, orchards, ships-and homes. Cost: \$29.95. END



"Saves customer \$35,000 per year"

COMPRESSION SPRINGS

"Have to be good-if they fail, engine fails"

TORSION SPRINGS

"Quality wire is paramount"



These are a few reasons why Rockford Spring Company, Rockford, Illinois, prefers Keystone MB Spring Wire. And there are more, as explained by Burdette R. Steadman, General Manager: "We have found Keystone's metallurgical staff helpful in working out our design problems. The physical properties of Keystone Wire are held very close, and so it is possible to achieve even temper and even length. Rejects are negligible."

Consistent uniformity of composition, temper and diameter is necessary for quality spring production. Keystone MB Spring Wire is also available in drawn galvanized and copper coated finishes, as well as spheroidized annealed

temper.

Your Keystone Wire Specialist and the facilities of our metallurgical department are at your service to help solve your wire problems.



Keystone Steel & Wire Company, Peoria 7, Illinois

EYSTONE RE FOR INDUSTRY

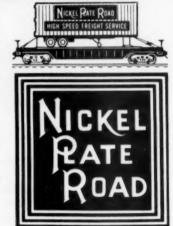
# PIGGYBACK SERVICE VIA NICKEL PLATE

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Nickel Plate Road Terminal Tower Cleveland 1, Ohio



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# Tiny Electronic Device Keeps Components Cool

A tiny electronic refrigerator can reduce the temperature of sensitive electronic instrument components by 50 degrees. Developed by Nortronics Div., Northrop Aircraft, Inc., it's one of the first industrial applications of the Peltier effect—the same principle used by Westinghouse Electric Corp. tor experimental heating-cooling devices without moving parts (BW-Jul.12 '58,p61).

What happens is this: An electric current is passed across the junctions of a loop connecting two dissimilar metals. One junction becomes hot, the other cold. The cold junction is then used to draw heat from the electronic components, which operate best at low temperatures.

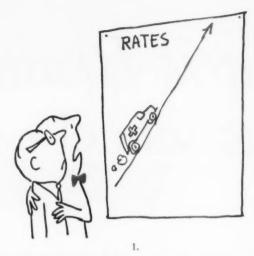
Nortronics engineer M. B. Grier says the device will mean reduced size and weight and increased operating efficiency in electronic equipment with thermally sensitive components. The prototype was designed for use with infrared seeker heads for guided missiles, where infrared sensors are conventionally cooled by liquid nitrogen.

#### **NEW PRODUCTS BRIEFS**

Fully automatic electric eye controls are now available on still cameras as well as movie cameras. A photocell computes the correct light reading and automatically sets the lens opening, adjusting it whenever light reaches the cell. All the photographer has to do is sight and shoot. Manufacturer: Bell & Howell Co., Chicago. Cost: \$79.95.

Paper-thin ceramic layers formed into lightweight honeycomb structures can withstand temperatures up to 1,800F and extreme thermal shock without significant thermal expansion. The honeycombs are made by a new technique, the Cercor process, from base materials including Pyroceram. The structures may be used as burner plates, covers in heating units, and air preheaters or after-coolers in small reverberatory furnaces. They are made by Corning Glass Works, Corning, N. Y.

A new polymer adhesive requiring no added resin or sticking material promises to work on synthetic films, metals, and other materials that have previously refused to adhere to each other—and to do it without heat or special surface treatment. The adhesive characteristics are inherent in the polymer's molecular structure. It's called "A-916-B" by the manufacturer, B. F. Goodrich Industrial Products Co.



Imagine Sandy Maxwell's plight—despite his business boom
His profit margin shriveled up. He heard the voice of doom.
He counseled with his cost accountant, learned the reason why:
"Too many accidents have sent insurance rates sky-high."



Dumfounded, Sandy cried, "Alas! I'm headed for perdition!"
"I'll call up Travelers," said the CPA, "with your permission.
Their Workmen's Comp insurance, Public Liability
Can level out your losses just like oil upon the sea,

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"Their safety experts tour a plant—root out each danger zone.

This slashes down insurance costs—it cuts 'em to the bone.

And claim locations? Travelers has two hundred fifty-one.

In paying off with lightning speed they cannot be outdone."



Just then, The Travelers man arrived to find he had a sale;
And Sandy signed the dotted line which ended his travail.

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Call forth a trusty Travelers man before you burst a vessel.

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- Covers 100 extra miles a day for Michigan car-hauler.
- Proves performance Missouri fleet operator tries 2, buys 80 in 18 months.

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# saves you money every



# - the Allison Fully Automatic Truck Transmission pays for itself within the first twelve months of truck operation

If you want a truck with both brains and brawn, get a Chevrolet, Dodge, Ford or GMC truck equipped with an Allison Automatic Transmission — and watch your profits start piling up.

For the Allison Automatic is more than just a truck transmission — it has an "Automatic Brain."

And because it *automatically* selects the right gear for every combination of load, grade and speed, it can boost engine life 33½% and more — cut trip time an average of 18% — give you big maintenance savings on drive shafts, axles, and the entire drive line.

But that's just the beginning of the savings you'll make with the "Automatic Brain."

You'll cut brake relining and maintenance as much as 50% because the hydraulic retarder takes over from service brakes for almost everything but full stops—eliminate engine disconnect clutch adjustment, repair and replacement because all clutching is auto-

matic - get greater fuel economy with the direct-drive lockup in every forward gear.

Driving with this automatic transmission becomes a pleasure, not a chore. Driver recruitment is easier, training faster. What's more, you can get extra tire mileage from the smooth transmission of power to the tread. And safety records improve because your drivers keep their eyes on the road and their hands on the wheel while the "Automatic Brain" does the shifting.

You can get the transmission with the "Automatic Brain" in Chevrolet, Dodge, Ford or GMC medium and heavy-duty trucks, tractors, school buses and other special-purpose vehicles. It's also available as an integrated engine-transmission power plant with Chrysler and Ford industrial engines.

For the full story on the "Automatic Brain" see your Chevrolet, Dodge, Ford or GMC truck dealer or write:

ALLISON DIVISION OF GENERAL MOTORS, Indianapolis 6, Indiana

FULLY AUTOMATIC TAUCK / TRUMS MUSSIONS



# Machines Keep Crops Too Big

Improved technology—such as the radish harvester at left—has enabled farmers to raise more on even less land.

The U.S. farmer is harvesting two record-shattering crops this year:

 One is pouring from fields and feed lots—by far the biggest output of food and fiber ever. The flow should continue next year, too. Machines such as those in the pictures are partly responsible.

• The other is coming from the U.S. Treasury—an unprecedented flood of dollars paid to farmers, either to curtail production or to prop the prices of their products. Last fiscal year, the Dept. of Agriculture spent \$4.9-billion for all its programs. This year, it expects to lay out just under \$7-billion, and, under existing legislation, there's little chance that next year's spending will be any less.

Added up, this means a year of prosperity on the farm, at least for producers with enough land, knowhow, and machinery to take full advantage of the good growing weather. The only exceptions are areas such as the Old South cotton belt, hit by rigid production controls. Along with the farmers, some of the nation's makers of farm equipment have been thriving.

• Changing Farms—The abundance both of crops and of government cash can be attributed to swift advances in agricultural technology. It's now possible for a farmer to raise bigger crops more cheaply than ever before. Because of all the help farmers now get from machines and fancy new methods, in many cases the government's acreage restrictions have made no dent on yields. Even with less land under cultivation, the farmer can harvest bigger crops.

The tricks of technology include experiments to stabilize soil and weather conditions; chemical fertilizers, insecticides, and weed-killers; and irrigation systems. Machines are doing more and more of the work–picking cotton, feeding livestock, harvesting spinach, picking and shelling beans. One mechanical harvester can pick and top radishes and ready them for washing (pictures).

There are also improvements in older types of machines, such as harvesters for wheat, corn, and other grains. For instance, one machine can now be used both to pick and shell corn. Tillage equipment has been upgraded; the latest models can plow, plant, or cultivate six and eight rows of field crops

at once, instead of the two rows standard 10 years ago.

 Automatic Hens—Of course, many vegetable and fruit crops will be harvested by hand for a long time to come, usually because they don't all ripen at the same time. But farmers have found ways to modernize handling of these crops. Lettuce, for example, is now packed in the field into cardboard shipping boxes that are assembled, folded up, and stapled on the spot.

Pushbutton farming is on the way, too. Chickens can be fed and watered automatically, the chicken house can even be cleaned mechanically—by a series of sweeper blades. The idea is to keep the chickens tranquilized so that they will gain weight as quickly as possible. Techniques for feeding hogs and cattle are moving in the same direction.

There's also a trend toward luxury for the operators of the new machines. Hydraulic controls are already common. Now the makers boast refinements such as eigarette lighters, power steering, and air-conditioned cabs.

 On Exhibit—The best way to see how drastically technology has been changing the farm is to look at a few examples. Despite the wide variations in farming practice, a few "showcase" operations are recognized as top practitioners of the latest methods.

#### I. Farming Without Hands

In vegetable farming, machines have quietly usurped jobs formerly handled by whole crews of laborers. Partly as a result, the vegetable farm is increasingly a big business, requiring a lot of capital, land, and equipment.

Buurma Bros. in Celeryville, Ohio, is a case in point. On a 600-acre farm, Buurma Bros. raises onions, celery, potatoes, radishes, spinach, and lettuce with a crew of 125 to 165 men. In the last dozen years, machines have made it possible for the outfit nearly to double its operations without much of an increase in manpower. The new machines include:

 An onion cultivator that chops the weeds and loosens the soil around onion plants—a job once done by 20 field hands.

 A radish harvester that pulls the radishes from the ground, tops them, and loads them into a wagon ready for washing and grading.

 A radish line that automatically packages the radishes in polyethylene bags—and reduces the packing staff needed from 18 to 3.

A potato digger that also loads the spuds onto waiting trucks.
Rich Investment—Buurma Bros. can



AUTOMATIC packaging machine wraps radishes in polyethylene at Ohio farm.

attest that it's expensive to mechanize vegetable growing. It has around \$175,000 tied up in trucks, tractors, cultivators, and specialized machines. In addition, it owns 17 tenant houses, greenhouses covering three-fifths of an acre, and a cold storage house.

The Ohio operation is also intent on taking advantage of other improvements in farming. It has boosted output per acre about 25% over 10 years ago. Thanks in large measure to the new onion cultivator, it has tripled onion yield. It is better able to control weeds, disease, and insects. And irrigation and a new underground drainage system—costing \$200 per acre—help free it from dependence on the weather's whim.

#### II. Lots of Lettuce

In the Far West and Florida, some large growers have specialized so completely that they plant vast irrigated tracts to a single vegetable crop, K. R. Nutting Co.'s 1,000-acre lettuce ranch

# JURY INCREASES CONDEMNATION AWARD BY 160%

Perhaps no greater controversy can occur in the life of a business (or individual) than that involved in condemnation procedure for public improvements. Neither side is always right! Yet in some cases no common meeting ground appears to be present.

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"Actual case history on file.



POTATO DIGGER unearths the spuds and loads them into a truck at Buurma Bros. farm. Such machines are turning vegetable farming into large-scale operation.



IRRIGATION makes it possible to cultivate rich crops on land otherwise wasted, and frees still others from traditional worries about weather.

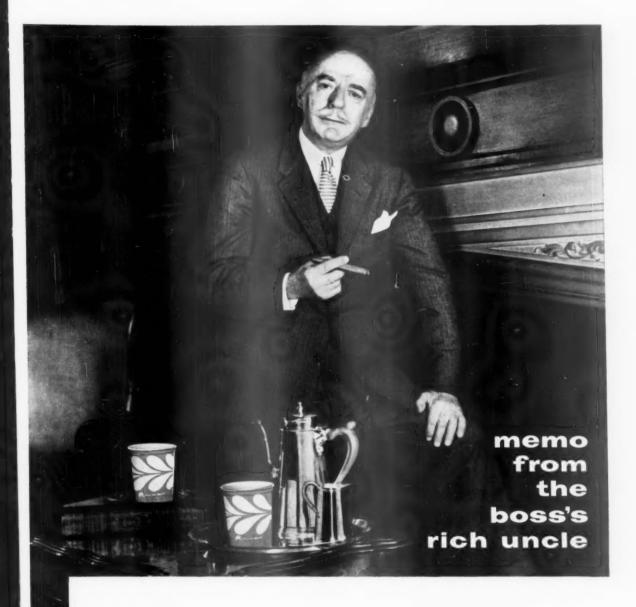
near Salinas, Calif., is one of these.

Probably the biggest postwar change in lettuce growing evident on Nutting's ranch is the switch to cooling in vacuum chambers. Formerly, ice was used. Vacuum cooling eliminates unwanted moisture that is apt to damage the lettuce. It brings the temperature down rapidly and uniformly. And it delivers better-looking lettuce to market.

No one has yet devised a machine that can thin, weed, or harvest the lettuce plants. Because all lettuce heads don't ripen at the same time, they have to be cut selectively—and machines don't know how to make the choice. But huge crawler tractors are assigned to shape the raised seed beds and do other tilling and cultivating.

• Streamlining the Work-With manpower still important, the emphasis is on making the best possible use of every field hand. The operators try to handle the lettuce as little as possible during harvesting, to reduce both costs and damages. One crew moves down the rows to cut and trim the lettuce heads and place them on the ground. Another crew packs the lettuce into paperboard cartons, while a third gang seals the cartons and heaves them into waiting trucks.

A few years back, the big growers such as Nutting tried to mechanize harvesting even more extensively. They used large \$10,000 packaging machines that straddled 12 rows of lettuce. Harvest hands cut the heads and dumped them onto convevor belts on the machine. A second crew of laborers, perched on the huge rig, packaged the lettuce as the machine moved through



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cup yourself and you'll specify China-Cote for your company feeding operation. For free Taste Test Kit, write on your company letterhead to Lily-Tulip Cup Corporation, Dept. BW-108, 122 East 42nd Street, New York 17, New York. \*T.M. Reg. U.S. Pat. Off.

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#### HEWLETT-PACKARD COMPANY

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the field. This year, though, the ma-chines have been discarded because growers found it too difficult to supervise packaging; too much substandard

lettuce was going to market.

Nutting has had better luck with scientific farming tricks than with ma-chines. Mainly because of disease-free seeds and more potent fertilizers and insecticides, the firm's average yield is now about 400 cartons per acre-compared with an average Salinas vield of 150 to 250 cartons in the 1930s. Last year, Nutting shipped 1,186 carloads of lettuce.

#### III. Oceans of Wheat

For farming on a really mammoth scale, look to wheat ranching. Typical of the biggest and best among wheat growers today is Vollmer & Bayne, which farm 15,000 acres in the semiarid Horse Heaven Hills of Southeastern

Washington.

On these Western wheat ranches, harvesting looks like Army maneuvers, with as many as 12 combines deployed in a single field. The combines are backed up by trucks hauling the grain, by service and repair crews, and by crews standing by to fight fire if it should break out in the fields. During harvest, the partners who run the ranch, C. G. Vollmer and G. L. Bavne, patrol the fields in radio-equipped station wagons, from which they scan operations through binoculars.

Their production has been soaring, largely because of the use of liquid ammonia as fertilizer since it was introduced in 1945. Potent and easy to apply, this substance has helped raise yield to 30 to 40 bu, per acre-against a longterm average of only about 12 bu. per acre for the area. If anhydrous ammonia is applied when there's too little moisture in the soil, it will burn out the wheat. But in good years, say Vollmer & Bayne, every \$1 spent on fertilizer will return \$3 to \$4 in increased yield. · More Machinery-To be a successful volume producer like Vollmer & Bavne, it takes a small army of equipment, These partners maintain \$250,000 worth of machinery, including six crawler tractors, 12 combines, nine trucks, four pickups, two station wagons, and all sorts of weeding, cultivat-

ing, and seeding equipment. This machinery is getting bigger all the time. Size is an advantage on a wheat ranch of such scale. Bigger tractors, for instance, can haul more equipment for cultivating, plowing, and seeding. And in the dry, dusty hills, it's important to work the soil over as quickly as possible after a rain, to prevent the precious moisture from evaporating. The larger tractors make it possible to do this much faster, and this can mean the difference between a

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good crop and an only so-so one.

Between machines, new land, and improved farming methods, the business of growing cotton has also radically altered in the last 20 years. The yield has nearly doubled—and it's still climbing.

#### IV. Twice As Much Cotton

Some of the most spectacular results have come in the Texas Panhandle, where cotton farmers now brag about vields of 625 to 750 lb. per acre—nearly twice the national average. Other farmers farther west—in New Mexico, Arizona, and California—are duplicating this performance.

The reasons include more powerful fertilizers and insecticides and improved seeds. The West Texas Agricultural Experiment Station at Lubbock has developed seed for West Texas farmers that produces cotton of uniform height. This makes it much easier to cultivate

and pick mechanically.

Opening West Texas—Cotton farming in West Texas began only 25 years ago when underground water reservoirs were tapped to irrigate the land and make farming possible. Since then, operations have been largely mechanized. For instance, Frank Gray, who farms about 650 acres of cotton outside Lubbock, owns eight tractors, one combine (for grain), 14 trailers, a spray rig, and all kinds of disc and ditch plows. In addition, he has two cotton strippers and plans for two more.

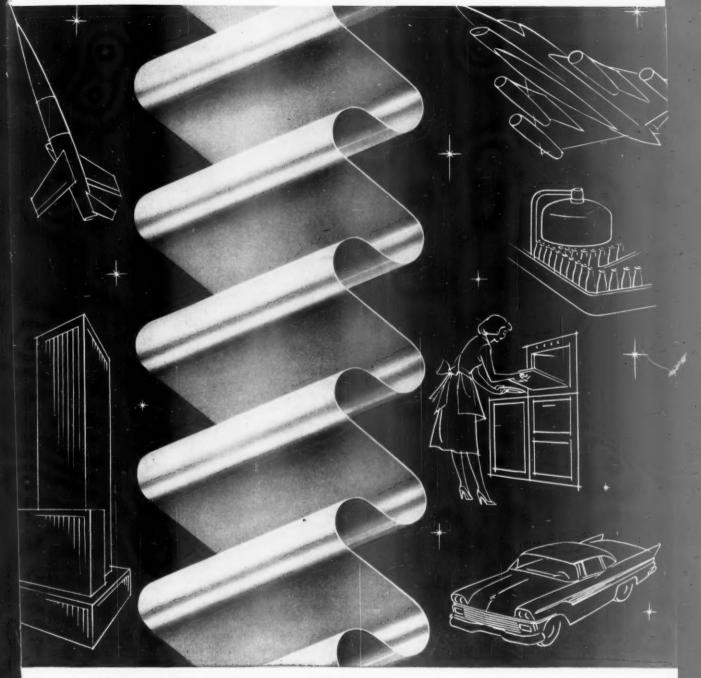
The cotton stripper is the only equipment designed specifically for the Texas plains. These devices remove the entire cotton boll from the plant, rather than just the cotton fiber and seeds as other cotton picking machines do. Gray still employs 150 to 200 field laborers to pick the best cotton by hand—usually from 40% to 60% of the total crop. Mechanical strippers do the rest.

• Expensive Machines—Other than in West Texas, where picking practices are different, mechanical cotton harvesters are in heavy demand again after a drastic shrinkage in sales in the last few years. These machines, designed to pluck the entire cotton crop, cost from \$10,000 to \$15,000, but they can outpick 40 to 70 toiling field hands. Sales slumped after government restrictions reduced acreage and made it cheaper to hand pick the cotton. But a recent sharp rise in the cost of farm labor has reversed the trend.

#### V. The Hens Have It Easy

The most automated operations of all on today's farms are the chicken factories.

On the Wrenn Bros. farm near Momence, Ill., for example, almost everything except actually laving the eggs



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Product designers, industrial designers, and engineers find stainless steel provides advantages no other commercial metal can offer. Its ability to fabricate readily into design, its high tensile strength, its resistance to distortion under extreme hot or cold applications, plus its corrosion-free properties, gives stainless steel a distinct advantage over other basic metals.

J & L offers a wide selection of quality stainless sheet and strip to extremely close visit our booth No. 36 tolerances up to widths of 48". Write for these technical data:

AT THE METAL SHOW OCTOBER 27 THROUGH 31 CLEVELAND, OHIO

- 1. Laboratory Corrosion Data.
- 2. Data Sheets (please specify the grades in which you are interested).



# Rockwell Report



by W. F. ROCKWELL, JR.

President

Rockwell Manufacturing Company

If the average person thinks of metering at all, he probably thinks of the meters at his home. The measurement of gas and water piped into homes—and into commercial and industrial

establishments—does account for the largest segment of meter use, and for the largest volume of our meter business.

But there are many other uses for meters *inside* of industrial and processing plants which are relatively unknown to the public but of increasing importance to business and industry. *In-plant* metering is not new—we have specialized in it for many years. But there is a growing interest in it now for very sound reasons: Increasing competition and rising costs have made cost control and quality control more necessary than ever before.

For instance, more and more industrial furnaces are being individually equipped with our gas meters for accurate cost accounting and as a check on the efficiency of equipment and personnel. (Oxygen, acetylene and other

gases are measured by the same type of meters.)

Our water meters are used on individual units of plants in the same way. And the growing practice of basing sewage taxes on the amount of water metered into domestic and industrial establishments has created another in-plant job for our water meters. Beverage companies, canners, and other processors are metering separately the amount of water that actually becomes a part of their finished products. Being able to prove how much water does not go out through the sewage system reduces the sewage tax substantially.

Our liquid meters are used by bottlers, food processors, petroleum companies, paint, drug and chemical manufacturers not only for cost control but for quality control through accurate measurement of ingredients. Products of our subsidiary, Republic Flow Meter Company, are used in many automated processes to control flow rate and coordinate it with other factors.

It is literally true that any material that can be run through a pipe can be measured by one of our meters. And it is also true that in an almost endless number of in-plant applications the cost of metering is trivial as compared with the savings that result from accurate control of cost, waste, and quality.

Quick and continuous communication between plants, sales offices, and headquarters, while absolutely essential, can become unduly expensive unless more efficient ways of achieving it are constantly worked out. We have found that mechanization in this area can create savings just as dramatic as those possible on the production line. For instance, our cost of inter-office and inter-plant communication now—between 70 plants and sales offices—is actually less than it was five years ago between only 29 plants and offices.

Since the first of the year, almost 2,000 veteran distributors have brushed up on valve fundamentals at a series of schools conducted by our Meter and Valve Division. About 100 separate schools have been conducted throughout the country, with major emphasis on helping customers get maximum utility and economy from lubricated plug valves.

One of our office managers gives used plastic belts from dictating machines to the organization for the blind in his city, where they are used for Brailling labels for phonograph records and various types of containers. They have proved so useful that we are encouraging all of our offices to follow the same practice.

One of a series of informal reports on the operations and growth of the

## ROCKWELL MANUFACTURING COMPAN

for its customers, suppliers, employees, stockholders and other friends



is done for the chickens automatically. They are seldom disturbed by human intrusion. The only person who ever visits them is a custodian, but they have been so conditioned to noise by blaring radios that they are probably unaware of his presence half the time.

When not producing eggs, the chickens cluster on wire decks around the central feeding areas. To quench their thirst, they can peck all the water they want from slow-dripping faucets that never go dry. Sliding blades under their perch clean the floor automatically. Antibiotics are added to their feed—also automatically—to keep them in prime condition.

In only two hours or so of work a day, one man can tend the 6,000 birds. Last year, the operators produced 70,000 doz. eggs. This year, by adding a few hundred more chickens, they expect to up the figures to 85,000 doz.

• The Same for Cattle—Livestock opcrators—including the Wrenn Bros. themselves—are applying some of the same techniques to feeding. The Wrenns keep their steers on paved lots, with scraper systems to keep the premises clean automatically. Bunk-line wagons mix and deliver the feed as they move alongside the lot.

Other farmers are using special silos that, with the flick of a pushbutton, send feed straight to the feed lot by

conveyor.

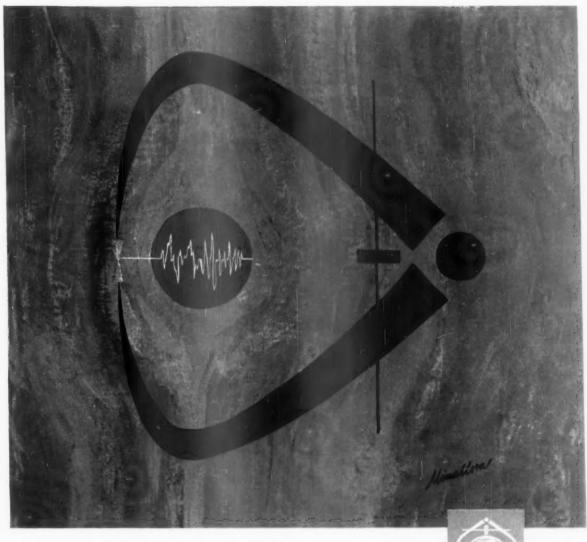
The feeds themselves are also drawing attention. To reduce nutrient loss and spoilage during storage, there are crop dryers, machines to turn hay into pellets, glass-lined silos, and plastic silo and feed covers. To fatten the cattle more quickly, feed is enriched with stilbestrol, a female sex hormone, and with antibiotics and other supplements.

Thanks to tricks such as these, J. P. Gannon and W. P. Gannon, for example, have doubled their beef and milk herds and boosted crop output one-third on their 687-acre farm outside Des Moines. At the same time, they need one less man on the place.

• Birthplaces for Hogs-Hog farming is changing, too. One system for controlling the hog's environment-in which sows give birth in isolated units rather than in a common farrowing shed-is already on the market. According to tests, these units have reduced the infant pig mortality rate by crushing from 14% to 2%, disease loss even more. They also cut the farmer's work in half.

#### VI. Surpluses Still Pile Up

By using all these techniques, the U.S. farmer has continued to expand his production despite government attempts to control output. It's becoming embarrassingly obvious that some



#### MEASURING BY TATNALL

Tatnall Measuring Systems Company is a subsidiary of The Budd Company. Its function is to invent and produce modern physical testing equipment to meet today's insistent demands, and to anticipate the increasingly complex requirements of industrial and technological progress.

It would be difficult to exaggerate the dependence industry must place on measuring systems. In less than a generation precision has spanned a gulf greater than the difference between the dollar watch and the chronometer.

Industry needs to know—and know exactly—the influence of temperature, incidence of fatigue, effects of vibration, reaction to tension, torsion, compression and stress, on materials and structures of all kinds in any environment, under both static and dynamic conditions.

Tatnall has made important contributions to the means of measuring. But the needs that have been met are as nothing compared to those to come. The Budd Company, Philadelphia 32.

#### INDUSTRY IN MOTION

The challenge of change is being met by many new Budd projects in the fields of nuclear energy, supersonic flight, radiography and plastics. These, of course, in addition to our established place in the automotive and railway passenger car industries.







INSULATING MATERIALS, MOLDED & LAMINATED PLASTICS

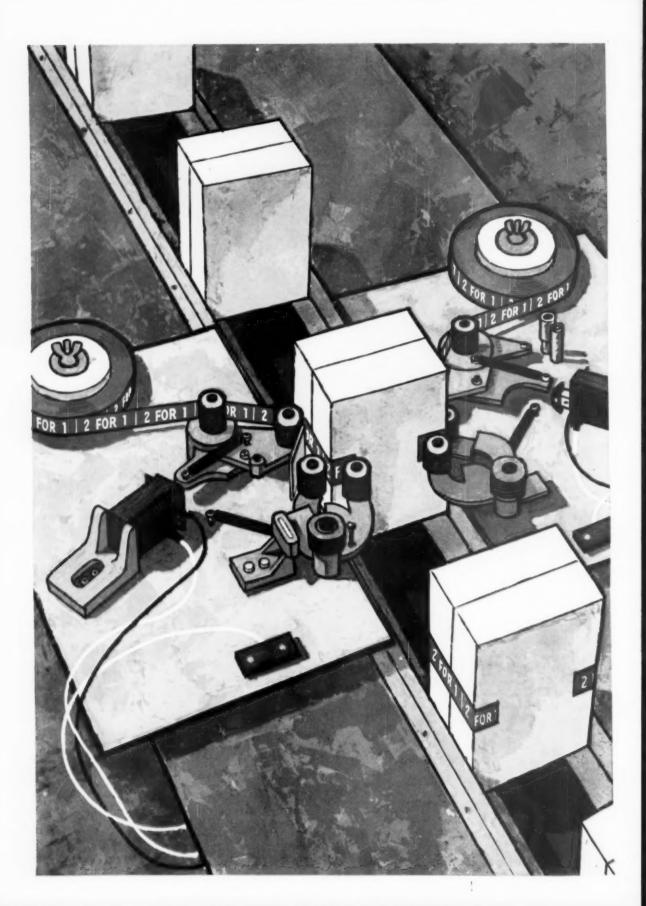


FOR DEFENSE









"3M-MATIC" taping and dispensing method goes to work...

# **Bundles 75 deals a minute!**

Total B

You name it. Two-for-one offer? One-cent sale? Special promotion? Almost any package-combining or bundling problem can be solved with "3M-matic" dispensing methods and the right "Scotch" Brand Pressure-Sensitive Tape.

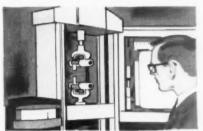
Here, for example, an S-69 Combination Package Bundler automatically applies measured lengths of printed "Scotch" Brand Tape to pairs of packages as they come down the production line. It turns out 75 "combinations" a minute, and can be adapted to handle multiple-unit bundling of various shapes and forms.

This is only one of the many tape-dispensing machines that make up the "Scotch" Brand family. There are motorized dispensers, semi-automatic and manual dispensers. There are machines to apply tape to tubes, flat surfaces, boxes, bags—practically any shape you can name. Together, these machines make up the world's most complete line of tape-dispensing equipment—with the right machine for every need.

And the *right* dispensing machine, in combination with the right pressure-sensitive tape, means better results in less time, at less over-all cost. 3M Tape Specialists have the right "3M-matic" tape and dispenser combination for you. They're ready to work with your staff. There's no charge or obligation, of course,

The industry's largest and best-equipped distributor organization assures you of prompt service. There's a "Scotch" Brand distributor near you. Call him, or write for further information to the Minnesota Mining and Manufacturing Company, Dept. BF-108, St. Paul 6, Minn.

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New Ameripol rubber cuts compounding costs, yet retains end product advantages

Goodrich-Gulf research has produced an important new key to economies in rubber production. Ameripol 4700, a new 50-part oilextended rubber has been added to the Goodrich-Gulf line to reduce costs with little or no effect on end product properties for most applications.

In fact, tests show that Ameripol 4700 has higher average tensile strengths than many 37½-part oilextended rubbers, yet the cost is significantly lower. Modulus of Ameripol 4700 is higher, too. And hardness is maintained.

In addition, Ameripol 4700 offers important advantages for applications where light color is desired. It can be used in many color applications where lower oil extended rubber is now being used.





Goodrich-Gulf Chemicals, Inc.

3135 Euclid Ave. . Cleveland 15, Ohio

different sort of approach is needed to

control the surpluses.

Even the most ardent Congressional supporters of the acreage allotment program admit it isn't working. The theory was that in return for price supports, farmers would agree to limit acreage. But the limits imposed by Congress and Agriculture Secv. Ezra Benson were never sufficient to offset the increases in yields made possible by technology.

Under present farm laws, only bad weather can hold production down. This year, corn crops are up 5% over last year, oats 8%, sorghum grains 3%, barley 7%, soybeans 17%, rice 11%, and wheat-thanks to the breaking of a drought-53%. Cotton output is up about 1-million bales over 1957

· Fewer Farmers, More Crops-While production has shot up 21% in a decade, the number of acres in cultivation has dropped 6%. This year's record crops will be harvested from the fewest acres in 40 years. The labor needed to bring in this crop is estimated at 13.5-billion hours-the lowest on record, down 21% since 1947-49. There's little hint next year will be any different:

· The wheat carryover next year. for example, will be around 1.3-million bu. That's enough to supply all the nation's domestic and export needs for a year with 300-million bu. left overeven if farmers didn't raise a single additional bushel in 1959.

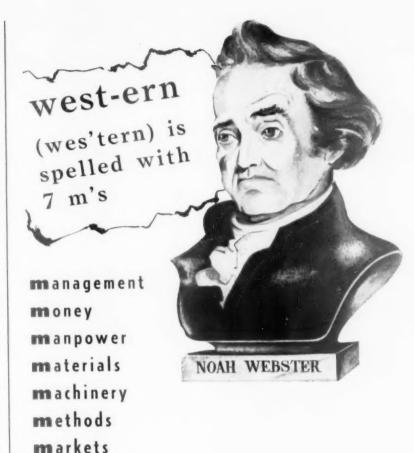
· Feed grains-such as corn, oats, and sorghums-have already piled up in the biggest surplus ever.

continue at record volumes.

Next year should end with banner yields-and banner surpluses. Federal payments to farmers should also continue high. Congress is not likely to return for its next session in any mood to deprive farmers of their payments from the Treasury. Prices may average somewhat lower than this year, but the dollar total will remain high because this year's peak output will be going to market in 1959.

• New Policy-Despite the record crops, no one is really rejoicing, because there's no sign at all that overproduction-agriculture's basic disease since World War II-has been controlled. In the key price-supported crops of wheat and corn, much of this year's output will simply wind up in the hands of the Commodity Credit Corp.

It seems certain that the dilemma will force a new set of farm policies on Washington shortly. These new policies are likely to be in the direction already pointed by Secy. Benson-fewer production controls and lower price supports. The hope would be that this would lead to the development of more efficient farm producers, big enough to avail themselves of all the technological advances-and strong enough to get along without subsidies. END



Developing satisfied customers for Western heat exchangers is based on the recognition and appreciation of seven cardinal principles: MANAGEMENT - of our resources, facilities and capabilities; MONEY - for continued plant and design improvement; MANPOWER - highly trained in modern techniques of design and fabrication; MATERIALS - ability to fabricate various metal combinations to meet your process problem; MACHINERY - of the latest design and highest productivity; METHODS for streamlined, efficient operation; MARKETS where Western heat exchangers perform to the highest degree of efficiency and economy.

We can put these seven principles to work for you.





# Big Paper Machine Starts Up

In time when market for newsprint is glutted, Canadian mill pushes the button on U.S.-built machine that's said to be the world's largest and widest producer of paper.

The world's largest papermaking machine went into production a few days ago at the Great Lakes Paper Co. mill in Fort William, Ont. About 75 executives from the U.S. pulp and paper industry watched the S8-million monster perform—the last and biggest unit in the Canadian industry's expansion of 730,000 tons in annual capacity since the beginning of 1957.

In the same period, U.S. producers have installed four more newsprint machines, representing about 420,000 tons of added capacity. So the expansion program of the last two years has added more than 1-million tons of capacity at a time when sales are dropping 8% below last year. Right now, the industry is operating below 85% of capacity.

Although the newsprint industry finally caught up with publishers' demands in the summer of 1957 (BW–Jul.27'57,p65), producers profess not to worry about today's glut of the market. They still see a long-term expansion.

• Made in U. S. A.—Great Lakes Paper Co.'s new machine was built at Watertown, N. Y., by the Paper Machine Div. of Black-Clawson Co. It can turn out 110,000 tons of newsprint per year, and it's also the widest paper machine ever built. A web of paper more than 27 ft. wide forms on its 28½-ft. wire screens, and its huge calendering rolls produce stock that's just right for newspaper color printing.

As daily newspapers face a tougher battle with television, they ask the papermills for newsprint that will take color printing, but they want it in the same volume and at the same prices as standard paper of the past. Canadian producers are already supplying several Midwest publishers of the Parade supplement with regular newsprint for color and rotogravure printing, replacing roto stock that costs an extra \$10 a ton.

Higher quality of the newsprint, says Black-Clawson, is due to improved calendering processes that were developed in 1954-55, when the latest big machines were designed. The machine builder sees wider and wider machines as the best way to get both quantity and quality out of a paper mill.

and quality out of a paper mill.

• Big Gamble—Black-Clawson, one of a handful of U.S. makers of newsprint machines, is so convinced of its theory about the superiority of still wider machines that it spent about \$14-million on research and development for the Great Lakes Paper Co. installation.

One of the machine's special competitive features is the ease, despite its size, of changing the belt-like wire screen that sieves out the wood pulp and forms the continuous web of paper. This change has to be made every two weeks, on this as on older machines. But Black-Clawson designed the cantilever frame that supports the wire so that the change can be made in 45 min., compared with half a working day on conventional machines. Considering that the new giant rolls out about a ton of paper per minute, every second of production is important.

Black-Clawson hopes that such refinements will give it an edge when the next round of expansion begins.

• But When?—There's a big "when," if not an "if," in this reliance on a new round of expansion. Papermakers agree that demand is bound to increase. Stanford Research Institute, among others, has predicted paper and paperboard consumption of nearly 50-million tons a year in 1965, compared with about 30-million tons this year.

For most of this increase, the forecast is based on expected growth of population and industrial production. But some of it comes from optimism about foreign markets, too. Said one executive at Fort William this month: "If countries like Ghana can buy Super Constellation aircraft to indulge in the luxury of having a national airline, they certainly will want more and more paper to meet the rising literacy needs of their nation."

To hear the newsprint producers talk, the next round of expansion will be a big one. But the equipment producers' order books at this moment don't reflect this confidence.

For the first time since the war, Canadian newsprint makers have only about 200,000 tons of new capacity scheduled to go into operation in the next 18 months. In the U.S., only two new machines are scheduled to start production next year: one at Bowaters Southern in Calhoun, Tenn., and the other at the Southland Paper Mills in Lufkin, Tex. Together, these additions will amount to about 175,000 tons of annual capacity.

Chances are that, for the next year or two, the big new paper machines like the one at Great Lakes and the new Beloit Iron Works machine at Coosa River Newsprint Co., second largest in the world, will be flexing their muscles against a soft market. END



# Richfield's own microwave system saves time and money

Deep in Southern California's rugged oil producing country, this production man is talking with his field office over Richfield's integrated communication system, which combines short wave radio and a dial telephone microwave network.

Richfield's efficient private network links California production and refining facilities with each other, as well as with head-quarters in Los Angeles, and with the radiophones of field men. Microwave also provides transmission facilities for teletype and for telemeters which record the flow of crude oil and refined products through pipelines.

This time-saving system helps Richfield people operate at peak efficiency. It is a typical example of the years-ahead planning that has made Richfield one of the West's leading oil producing, refining and marketing companies.





# WESTINGHOUSE TRAFFIC SENTINEL®



"Westinghouse developed Traffic Sentinel exclusively for its operatorless elevators," explains Betty Furness. "It is a door control mechanism which operates electronically. In this picture, elevator doors open the instant the elevator arrives at the floor to allow passengers to enter.



2 "Doors remain motionless during continuous loading of the elevator. This is the built-in courtesy feature of Traffic Sentinel. Doors don't startle passengers by closing prematurely, neither do they intimidate' with false starts.



3 "Last remaining passengers are entering elevator, yet not once have the doors attempted to close. The reason is simple: door openings and door closings are controlled by Traffic Sentinel which is activated by passenger traffic flow—automatically . . . electronically.

Westinghouse traffic sentinel elevator doors

# DOORS HAVE BUILT-IN COURTESY



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"Doors close and elevator will take passengers to their desired floors. No overcrowding. Doors are closed automatically and courteously when the last passenger enters—or when the elevator becomes substantially loaded."

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STAID bowler hat of a buyer reflects the quiet atmosphere at Diamond Syndicate.

#### BUSINESS ABROAD

# In Diamonds: A

The diamond industry boldly calls itself a monopoly and, according to the evidence available, seems to like the fact that it is.

The heart of its price-controlling operations is the Central Selling Organization, often referred to as the Diamond Syndicate, at Holborn Circus in London. The brain directing the industry's far-flung, but tightly regulated, mining and marketing is Harry Oppenheimer, chairman of De Beers Consolidated Mines, Ltd. (cover and pictures).

Bridegrooms buying a gem diamond for between \$615 and \$1,275 a carat (cut but unmounted) and grindingwheel makers paying \$2.85 for far cheaper industrial diamonds may have it in for CSO, Oppenheimer, and the industry's near-monopoly. But Oppenheimer's lustrous diamond empire can make a good case for its cartel practices. • Diminishing Supply—The supply of

• Diminishing Supply—The supply of gem stones is not what it used to be in the diamond-rush days of the 1880s. The 3,106-ct. Cullinan, the world's largest, is a once-in-a-century rarity; and these days the industry is lucky to find even a 20-ct, stone.

The costs of getting diamonds from underground are relatively high. Few surface deposits of any value exist today. Mining involves the mechanized art of sinking vertical and horizontal



Harry Oppenheimer, De Beers chairman, runs . . .



the monopolistic Syndicate in London that . . .

# Cartel and Proud of It

shafts into the bluish ground of volcanic "pipes"—huge, roughly circular veins that snake from the surface deep into the ground. A good grade of socalled Kimberlite vields one part diamond to 14-million parts rock and gravel. By contrast, medium-grade properties of copper, zinc, or lead have one or two parts metal in every 100 parts of ore.

• Variable Demand–Like most other commodities, diamonds follow the business cycle, selling poorly in a recession—as happened this year—but moving fast in good times. Beyond that while Oppenheimer's CSO controls about 90% of all diamond sales, its

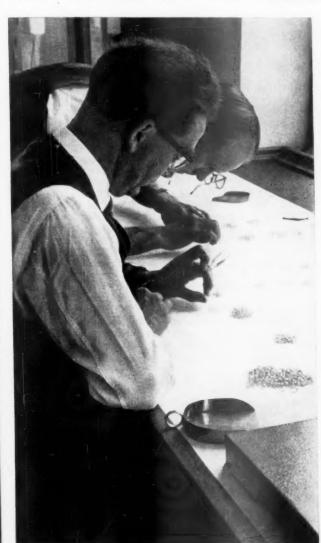
business is not abnormally largearound \$215-million a year.

Even without the cartel, diamonds would probably bring good prices because of their magnificent beauty. But Oppenheimer's goal—like that of his father, Sir Ernest, who died nearly a year ago—is controlled sales and stable prices, without the competitive chaos that hit the industry in the late 1920s and early 1930s.

That explains his trip from Kimberley, De Beers' headquarters, to Tanganyika last July. There, in one of the shrewdest deals in diamond history, he bought control of the famed Williamson Diamonds Ltd., located at



SECURITY precautions are all-important, Guard controls door to sorting room.



buys and sorts African-mined diamonds and . . .



sells them in sealed packets to cutters.

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## EBERHARD FABER

Diamonds in the Rough



Mwadui in the bush country 60 mi. south of Lake Victoria.

When Canadian-born John Thorburn Williamson died last January at age 51 (personal fortune: around \$100-million), the industry feared his heirs would try to sell outside the Syndicate. Williamson himself had tried marketing Mwadui's output on the free market in 1950, but gave in to the Syndicate's pressure in 1952. And even before that, when the mine was first discovered in 1940, Sir Ernest had offered to buy out Williamson—but failed. Now Harry Oppenheimer has skillfully brought the \$8.4-million-a-year mine under De Beers wing.

• Cracks in Syndicate—Even so, 49year-old Oppenheimer sees cracks appearing in the walls of his syndicate, mostly from:

 General Electric's development of manmade industrial diamonds.

 Russia's threat of exporting Siberian-mined diamonds to the West, once Soviet domestic demand has been filled.

 "Illegal" diamond sales outside the Syndicate—as much as \$56-million a year—from smuggling out of Sierra Leone in West Africa and occasionally heavy shipments (\$15-million worth in one recent year) from Brazil.

Grumblings from newly independent Ghana that it will pull its two
main producing companies out of the
Syndicate when their sales contracts
expire. (Ghana already is the main
source of the \$10-million to \$15-million worth of diamonds sold "legally"
outside the Syndicate.)

These problems point up a basic change in the industry. The freewheeling, romantic days of individual

operators, such as Barney Barnato, are over. The main job now is the businesslike task of keeping a tight grip on worldwide sales.

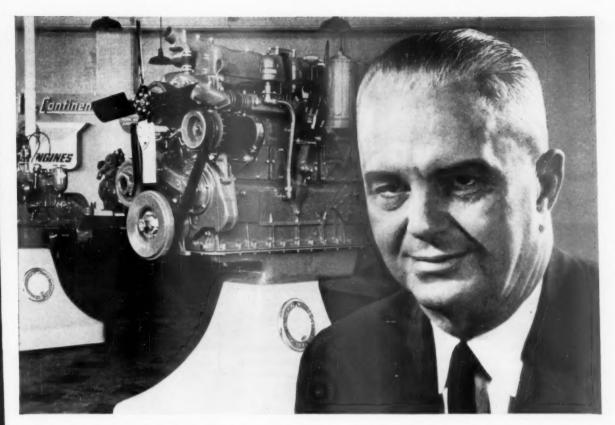
#### I. The Syndicate

Oppenheimer is a director of 55 companies and board chairman of 25. The top two companies he heads are Anglo American Corp. of South Africa, Ltd., the world's No. 1 gold producer, and De Beers. While he oversees a vast network of interlocking interests, from copper to uranium, his first love is diamonds and De Beers.

• South African Colossus—De Beers itself is a colossus—\$467-million in assets, \$65-million in net profits last year. It accounts for all the diamond output in South Africa and the British protectorate of South West Africa (map), except for a trickle from the government of South Africa's "alluvial diggings."

De Beers also has an umbrella over other producers in Africa, which from French Guinea to Cape Town provides 98% of the world's diamonds. De Beers indirectly holds a financial interest in several of these outsiders. More important, all of them sell through the De Beers-dominated Syndicate.

The largest producer in the entire industry is the Congo's Societe Miniere du Beceka in which De Beers indirectly has a 19.1% interest. It mines 15-million carats annuallymore by weight than all the De Beers group. But 97% of its output is cheap industrials. In fact, Consolidated Diamond Mines of South West Africa, Ltd., De Beers' richest property (90% gems, 10% industrials), grossed \$47.6-



## "Heller working funds enabled us to weather the stormiest period in our history"

says, C. J. Reese, President, Continental Motors Corporation

"The use of a Heller Working Fund Program was a turning point in the history of our company," says C. J. Reese, President of Continental Motors Corp.

"When our major customers started to manufacture their own motors, we had to look for new markets. This meant a major shift in our product development, marketing and production. Heller funds and services helped us through this rough period, gave us the cash we needed to continue operating efficiently and profitably. Heller funds served the same purpose as operating capital, enabled us to build our organization and sales to new highs."

Continental Motors Corporation, today, is the world's largest independent manufacturer of motors for the industrial, aircraft, marine and transportation industries. Sales have grown from a few million dollars (when Heller funds were made available) to more than 100

million dollars annually. Continental Motors has outgrown the need for Heller funds, but like more than 10,000 other past Heller clients, has been helped to financial independence and increased profits through a Heller modern financing program.

How does Heller do it . . . by providing individually designed programs exactly fitted to a company's financial problems. Heller modern financing programs are extremely flexible and provide advantages that other types of financial assistance cannot match.

If your company can see opportunities for increased profits through the use of additional working funds, why not learn the facts about Heller modern financing? Write for a free copy of "Operating Dollars For Every Business" and for specific information pertinent to your own situation. Your inquiry will be treated in confidence and without obligation.



Write Dept. BW-10

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million last year, more than double Beceka's \$23-million.

• Marketing Power—De Beers' real power is in the marketing end. Along with Anglo American, it holds between 37% and 75% in each of the four companies forming the Central Selling Organization or Syndicate.

The propriety of the industry's selling monopoly is an article of faith with De Beers, from Harry Oppenheimer on down. It is somewhat sensitive, but certainly not on the defensive, when asked to justify the monopoly. It contends that the monopoly is "benevolent"—in the best interests of producer, merchant, and consumer.

#### II. How It Operates

After sizing up the market, CSO allocates to each producer—through negotiations—a certain percentage of total sales. Virtually all diamonds produced are sold in London at monthly "sights" to buyers from the main diamond-cutting centers—New York, Antwerp, Amsterdam, Tel Aviv, and Idar-Oberstein (West Germany).

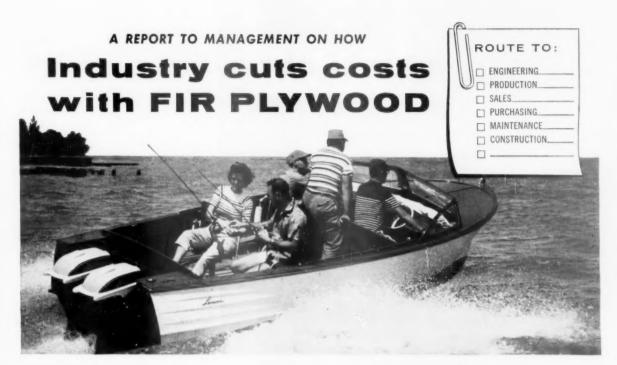
Notified when the "sights" are to be held, the cutters send in their orders. Then, CSO makes up packets for each dealer, approximating—though never filling exactly—his order. (A packet includes stones of varying weights, colors, and shapes.) In private rooms at CSO in London, the cutter studies his packet for hours, often days. He can accept or reject the packet, and, within polite limits, haggle over price.

• Controlling Supplies—When supplies are short, CSO allocates diamonds where it thinks they will do the most good for the industry. When demand seems weak, it has no qualms over restricting dealers' orders to avoid overloading a particular market. CSO's greatest fear is a market brimming with unsold diamonds.

The most telling argument for the monopoly is the floor CSO puts under prices in a depressed market. It agrees to take a certain minimum of diamonds, whether it can sell them or not. In bad times, producers may not keep mining full blast. But CSO makes it worthwhile for them to stay in production by carrying the costs of stockpiling.

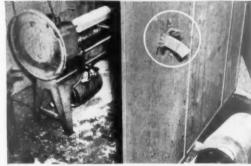
• Stockpiling—CSO has impressive resources to weather economic storms. Stocks of diamonds built up during the 1930s depression were sold after World War II at increased prices. CSO salted away some \$50-million from these sales as a cash reserve. Altogether, adding in the financial resources of CSO companies and the De Beers Group, the industry has about \$140-million in cash and government securities to meet crises. On top of that, De Beers has extensive non-diamond holdings.

CSO claims it never tries to keep



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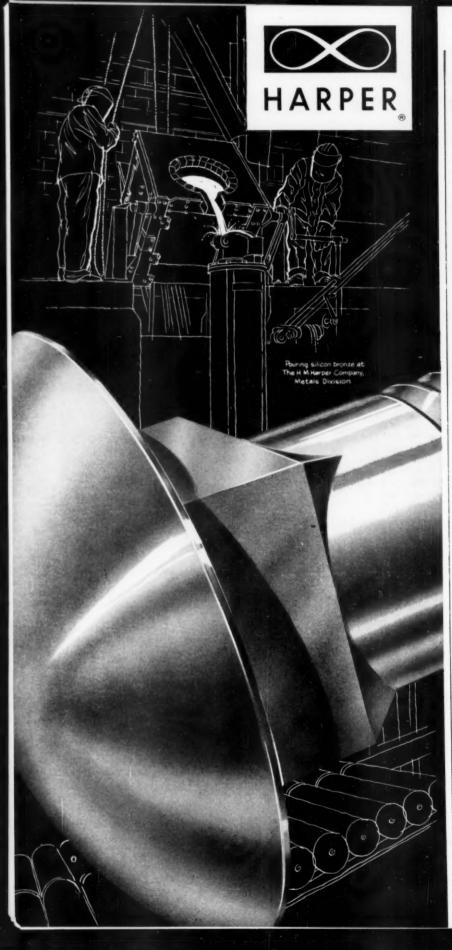
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prices artificially high. Of course, diamonds are one of the world's most expensive gem stones. A 1-ct. diamond (144 ct. to an ounce) may cost as much as \$1,275 before mounting, depending on what the trade calls the "four C's" -color, clarity, carats, and cut. (At a recent London auction, a 17-ct. stone was sold for \$79,800.) And, through the years, prices have gone up, with a 1-ct. stone selling for \$325 to \$600 in 1940 or about one-half the present price range. But what CSO says it is doing, is insuring that prices consistently "reflect the long-range realities" of diamonds. This, it says, is as important to the final owner as to the trader. It argues that drastic fluctuations in price would permanently impair the desirability-and salability-of gem diamonds as a luxury commodity.

"Copper can plummet in price," says Harry Oppenheimer, "without affecting its long-range prospects. But a sharp drop in diamond prices would destroy confidence—no one would buy them."

#### III. Giant in the Making

Oppenheimer's De Beers has been the most famous name in diamonds ever since Cecil Rhodes, an even more famous name, bought out other diggers in the original Kimberley strike. In 1880 he formed De Beers Mining Co., Ltd. By 1888, he had outfoxed Barney Barnato—a rough-hewn financial wizard—for control of South Africa's major diamond fields.

Since then, De Beers Consolidated Mines has acted something like an amoeba, growing by accretion in contact with other organisms. What Ernest Oppenheimer did on becoming De Beers' chairman in 1929, was to give this erratic growth some direction.

• Oppenheimer's Start—A shy but tough-minded German, he left his job in London as a diamond sorter at age 22 and went out to South Africa. With W. L. Honnold, an American geologist with an interesting—and, as it turned out, profitable—theory on where to find gold deposits, he formed Anglo American. The partners used the good offices of Herbert Hoover, a friend of Honnold, to get substantial backing from J. P. Morgan & Co., Inc., and other American banks.

Despite Anglo American's gold holdings, Oppenheimer never forgot the lure of diamonds. After World War I, he bought up hard-pressed German mining companies in South West Africa and formed Consolidated Diamond Mines. Then, he negotiated Anglo American's purchase of De Beers stock.

The success of Sir Ernest (knighted in 1921) was not solely a matter of muscling in on powerful competitors. In the early 1920s, new diamond strikes and sales outside the Syndicate ruined

prices. The 1929 depression turned this problem into an industrywide disaster.
• Extending the Syndicate—Cajoling

 Extending the Syndicate—Cajoling and pressuring competitors, Sir Ernest tightened De Beers' control of African diamonds. He converted the original syndicate that had handled only Kimberley's sales into the much broader Central Selling Organization.

For many years, son Harry had worked as Sir Ernest's right-hand man and heir apparent. After Oxford, he joined Anglo American. On his father's death last November, he already was managing director of Anglo American. Beyond that, his personal holdings in Anglo American and De Beers were considerable—held, it's generally beheved, through a private company, Ernest Oppenheimer & Son, Ltd.

• The New Chairman-H.F.O.-as De Beers executives call their new chairman-has what is known as the "Oppenheimer shvness." (Sir Ernest once tainted after forcing himself to go through with one of his rare press conferences.) Whether he has Sir Ernest's toughness and breadth of vision, remains to be tested. But one associate recently said: "Sometimes, H.F.O. will make a gesture or say something that will bring you up short, and you'll say to vourself, 'There's the old man again." So far, Oppenheimer has given a relatively free hand to the close-working management team he inherited from his father. "But they don't forget who's sitting in the chairman's seat." says one executive of Anglo American.

Oppenheimer's personal interests go beyond diamonds, or even business in general. He frequently leaves his home in Johannesburg to relax at Mauritz-fontein, outside Kimberley, where he breeds race horses. Until his semi-retirement from politics last year, he would voice his liberal views against the Nationalist government's apartheid (segregationist) policy as a member of the opposition in parliament. He thinks apartheid is not only morally wrong, but threatens economic disaster for South Africa.

#### IV. Current Problems

In fact, racial discord and nationalism throughout Africa are going to be a growing problem for Oppenheimer. When he bought the Mwadui mine from bachelor-recluse Williamson's heirs, he willingly accepted a 50-50 partnership with the Tanganyikan government (though De Beers will operate the mine). "It gives stability and acceptance," says Oppenheimer.

• Sales Slump—His main worry this year has been the slump in industrial and, to a lesser extent, gem sales in the U.S., which normally buys about 80% of CSO diamonds. Early last year, the U.S. government stopped





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stockpiling most types of industrial diamonds. Then came the recession. Sales for the first half of this year were \$23.5-million below 1957's first half. But De Beers claims it always regarded the stockpiling as gravy on the side. And now, with sales here picking up, it looks back on the recession as a temporary crisis that CSO successfully met.

• Manmade Diamonds-Oppenheimer says he's not troubled by GE's manmade industrial diamonds. "There's no reason synthetic and natural diamonds can't live together, the same way synthetic and natural rubber have done,' he says. In addition, GE's stones compete only with "crushing bort," used for abrasives, and the Congo, not De Beers, is the biggest bort producer.

But GE's side of the story doesn't bode well for Oppenheimer and the industry, which has seen industrial diamonds rise from 12% to 31% of total sales since World War II. Last year, when GE began synthetic production, the London price for bort was \$2.85 a carat; the open-market price was \$4 to \$4.25. Since then, the openmarket price has dropped to \$2.65; GE's, to \$2.96. Trade rumors suggest that private dealers, not CSO in London, are the ones being hurt.

GE is developing larger diamonds for a wider range of uses, and, even with an expanding market, may bite into CSO's sales here over the long run. The real blow would come from development of manmade gem diamonds. GE says it has no plans for that now.

· Soviet Production-Still another worry for Oppenheimer is Soviet diamond production. Sir Ernest reportedly prevented "legal" sales of industrials to Moscow. For years, Moscow had bought them through private channels in the West. But since 1954 the Russians have made large strikes in Siberia. They are trying to fill expected 1960 demand for 6-million ct. of industrials through domestic mining. Later, they undoubtedly will sell diamonds for foreign currency-which means sales in the West in competition with CSO.

Even discounting troubles with Russia, Oppenheimer says that existing diamond deposits are running out. Unless there are new strikes, comparable to Williamson's mine, industry output in 20 years may be half what it is now.

One thing not bothering Oppen-heimer is the long-term growth of the diamond market. "It used to be the rich who supported diamond sales," he says. "Big stones get the publicity. But the real money now is in small diamonds-engagement rings for the many, not the few.'

• Best Bet-He surely would agree with a De Beers prospectus put out by a London brokerage: "Diamonds are said to be a girl's best friend, but diamond shares may be even better." END

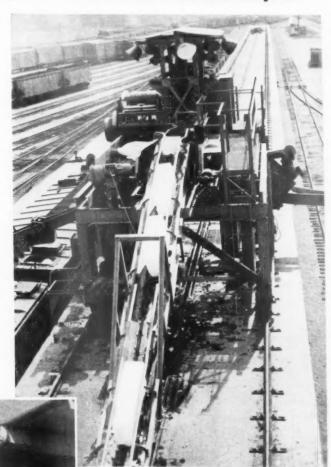
## **BRAKING THE ICER**

## Link Belt dock-type car icer uses Wagner Brake System for safe sure stops

The Link-Belt self-propelled refrigerator car icer at Chicago Great Western Railway's shops at Oelwein, Iowa travels along its own track on an elevated dock. It scoops 300 lb. blocks of ice as they are chain-conveyed along the dock, reduces them to sized ice which it discharges into refrigerator cars on either or both sides of the dock at the rate of  $1\frac{1}{2}$  to 2 minutes per car.

This machine is equipped with a Wagner Hydraulic Braking System, which permits fast, sure positioning of the icer.

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# In Business Abroad

Three-Wheeled, Three-Seat "Convertible" Chugs In From Italy at 75 Mi. Per Gal.

The "Surrey," a three-wheeled convertible runabout, has just been introduced in the U.S. by Innocenti Corp. of Italy. It delivers 75 mi. per gal. and sells for less than \$1,300. Top speed is 45 mph.; it has a single-cylinder motorcycle - type



engine. The body was designed by Ghia, one of Italy's famous coachmakers.

Seating two on a wicker rear seat behind the driver, the scooter-type "Surrey" is designed primarily for use at resorts, golf clubs, and places where inexpensive short-haul transportation is required.

#### Aerojet and Britain's Bristol Launch Joint Venture in Solid Rocket Field

The first international joint venture in solid fuel rocket technology was concluded last week. Aerojet-General Corp. of Azusa, Calif., and Bristol Aeroplane Co., Ltd., of Britain, have formed Bristol-Aerojet, Ltd.

The new company, with headquarters in Britain, is designed primarily for the development of new techniques and uses for solid propellants. Plans call for a plant in Britain; it will make and test solid-fueled rocket motors.

The agreement gives Bristol-Aerojet exclusive rights to Aerojet-General's solid propellant rocket products in Britain and the Commonwealth. Later, the California company said, this may be extended to include other friendly countries in Western Europe.

#### U. S. Renews Efforts to Work Out International Lead-Zinc Accord

The new quotas on lead and zinc imports (BW-Sep. 27'58,p155) may not last long. The Administration is pushing hard for a substitute in the form of an international controls agreement on exports. This week the State Dept. submitted a new draft agreement to the

United Nations' committee, which has been charged with finding a solution to the lead-zinc problem.

The new scheme is a modified version of the one that nearly won approval at the recent London Conference. The London plan called for a voluntary 20% cut in exports by producing countries. Canada and Australia balked, however, at accepting it, and the U.S. reacted almost immediately by slapping on quotas.

Now U.S. officials are hoping that the new proposal will satisfy Canadian and Australian objections and permit agreement on international controls. If that hap-

pens, the U.S. will remove its quotas.

### Private Investment by U.S. Companies Is Spur to Australia's Economy

The number of plants producing for the Australian economy has nearly doubled since World War II-from 31,000 to about 55,000. This has helped push employment up by nearly 40%.

Much of the growth and many of the new jobs are the result of the government's campaign to induce foreign companies to invest in the country Down Under. Here are some recent contributions by private U.S. capital to Australia's economy:

• Kraft Foods Div. of National Dairy Products Corphas opened a \$9-million headquarters plant at New Melbourne. Kraft also will open a new cheese plant later this year in West Victoria. The company provides jobs for about 15,000 Australians.

• B. F. Goodrich International, of Akron, Ohio, is putting up a \$10-million rubber plant jointly with Ampol Petroleum, Ltd., of Australia. About 57% of the company's capital will be provided by Goodrich, and 43% by Australian investors.

• Corning Glass Works, Corning, N. Y., is building a plant in Australia to produce television tubes; the site and cost of the plant haven't yet been decided.

 McNally-Pittsburgh Mfg, Corp., Wellston, Ohio, is investing a reported \$600,000 in a local plant of A. E. Goodwin, Ltd., Sydney. Goodwin produces U.S.-designed coal mining equipment under license, and expects to export to Southeast Asian markets, including India.

#### **Business Abroad Briefs**

France's Etienne Hirsch is slated to replace Louis Armand as president of Euratom, the six-nation Western European Atomic Energy Community. Armand has told Euratom's executive committee that he will resign because of bad health. Hirsch is head of "Plan," the French government agency that draws up and executes the government's five-year economic plans.

The first of a series of publications on international investment conditions has been published by Stanford Research Institute's Center for International Industrial Development. It's entitled "Brazil: Factors Affecting Foreign Investment."

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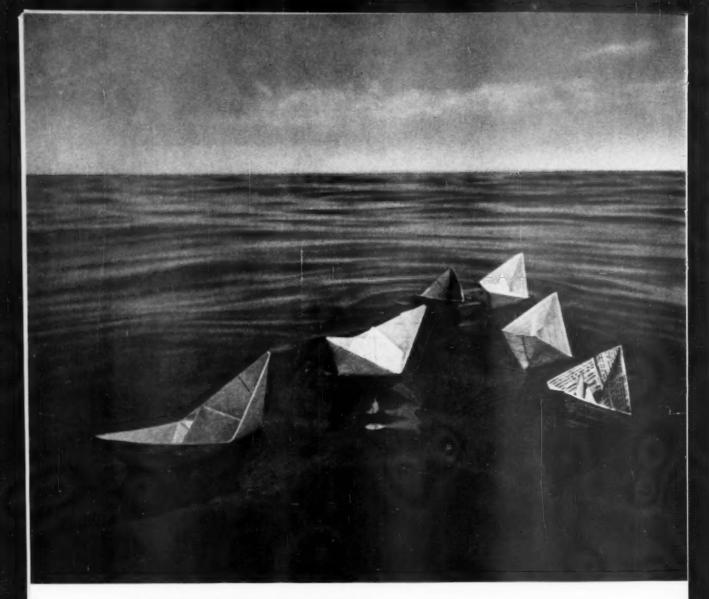
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# INTERNATIONAL OUTLOOK

BUSINESS WEEK OCT. 18, 1958



Army dictatorship rather than parliamentary government, has become the only immediate alternative to Communism in many parts of Asia.

Army regimes have just taken over in Burma and Pakistan. In Malaya and Indonesia, army leaders are playing a more active political role.

India now is about the only example in South Asia of relatively successful parliamentary democracy. And its future seems to hang precariously on one man—Prime Minister Nehru.

Pakistan revolution was led by Pres. Iskander Mirza (once a civil servant in British India) and a group of senior army officers.

These men had long been worried by the drift toward anarchy and political corruption in Pakistan. Then, since the Iraq revolution, there have been signs that a young officers' revolt might be brewing.

It's a question, though, whether the Mirza government can bring stability to Pakistan. Some observers regard him as a tired, elder statesman. To carry out an economic development program (including land reform), Mirza will need energy—and some new appeal to public opinion.

French army leaders in Algeria seem to have lost the political power they seized during the coup of last May.

Gen. de Gaulle, the man they put in office, this week ordered the military to get out of politics. (Many army officers had joined Committees of Public Safety.) De Gaulle also ordered the army to allow all Algerian groups reasonable freedom to campaign in the coming elections.

In taking this bold action, de Gaulle aimed to undercut both French and Algerian extremists. He already has had considerable success. On one hand, French officers in Algeria have resigned their political posts. On the other, the leader of the National Liberation Front (FLN) has dropped his demand for immediate Algerian independence.

Future trade relations between the U.S. and Western Europe will be shaped by a meeting that began this week in Geneva. It's the annual session of GATT (General Agreement on Tariffs & Trade).

At stake is GATT's power to push the European Common Market into liberal-trading policies toward the outside world. This year's meeting will be the last one prior to the start of the Common Market in January. It's supposed to lay the groundwork for the big round of tariff negotiations that are due in about 18 months between the U.S. and the Common Market.

At the GATT meeting, the key struggle will revolve around West Germany's import policies. At issue are new German curbs on coal imports and long-established import quotas on farm products, some chemicals and plastics, and other industrial goods. These quotas, which were imposed after the war to save scarce foreign exchange, discriminate against imports from hard-currency countries, including the U.S.

A majority of GATT members insist that such import restrictions can't be justified, now that Bonn has huge foreign exchange reserves. The International Monetary Fund takes the same position. Even the Germans now defend themselves on straight protectionist grounds.

## INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK OCT. 18, 1958 Washington fears that, if Bonn does not scrap its quotas, GATT's influence over the Common Market will be just about nil. Then, West Germany's protectionist policies would be built into the Common Market.

Britain and other members of the Commonwealth will lead the attack on the German trade barriers. The U.S. will also throw in its weight. But Washington's new lead and zinc quotas, plus our firmly established quotas on agricultural imports, will weaken the U.S. bargaining position.

From now on, the U.S. will give more support, both publicly and behind the scenes, to the British-sponsored Free Trade Area. This is another facet of Washington's new drive to keep the Common Market from becoming a protectionist club.

But the chances of launching the Free Trade Area in tandem with the Common Market are dim. There's an important meeting in Paris next week on the issue. Apparently the French will drag their feet, and the Germans will waver from their earlier support of FTA. So, if the British scheme is to get off paper, it looks as though the U.S. will have to give it a strong push.

A new study of ways to stimulate private foreign investment is being launched in Washington. Ralph I. Straus, a board member of R. H. Macy, will head the study group and report to C. Douglas Dillon, Under Secretary of State for Economic Affairs. The Straus panel, which will be a mixed government and private group, will examine a whole crop of new proposals for increasing the flow of U. S. investment abroad.

Standard Oil Co. (Indiana) may be striking another blow at the oil industry's traditional ways of operating overseas. It's negotiating a deal with Saudi Arabia under which Indiana Standard probably would accept less than 50% of oil-concession profits. The Saudis also might participate in profits, from the wellhead to retail sales, through formation of a joint "integrated" company.

Venezuela won't be a picnic for foreign oil companies in the months ahead. It's calling for a bigger share of oil profits.

Though unified on the oil issue, Venezuela's political parties are fighting over a joint candidate for the presidency. The first elections since dictator Perez Jimenez' overthrow are supposed to take place next month. The parties might agree on Admiral Larrazabal, popular head of the provisional government. If not, there's likely to be a free-for-all. That could end with a victory for Romulo Betancourt, whose Accion Democratica has the strongest hold on voters. Or it could bring violence, with the army taking the spoils.

Aeroflot, the Soviet state airline, is updating its fleet to maintain prestige against new competition from the West. It's starting to use the jet-powered Tu-104A, improved model of the Tu-104 (which flew Moscow-New York a year ago), on routes to more than 20 foreign capitals. It plans future service with the faster jet Tu-110. In addition, it is developing a fleet of turboprops, including the long-range Tu-114D that seats 220 passengers.

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## What the Life Companies Bought and Sold

Net Domestic Portfolio Acquisitions U.S. Life Insurance Companies	1954 1955 1956 1957						
Total Mortgages	\$2.7	\$3.5	\$3.5	\$2.2	1958 \$2.0		
Corporate Bonds (Including Private Placements)	2.0	1.8	2.0	2.5	2.2		
Corporate Stocks	.4	.2	*	.1	.2		
State and Municipal Securities	.5	.2	.2	.1	.3		
Policy Loans	.2	.2	.2	.3	.4		
U.S. Government Securities	8.—	5	-1.0	5	2		

\*Less than 50,000,000

Data: 1954-57 Life Insurance Association of America: 1958-BUSINESS WEEK Estimate.

@ BUSINESS WEEK

# Changing Their Investment Ways

The nation's life insurance companies have lately been socking their money away in different places—less of it in government bonds, for one thing, gradually more in stocks.

Treasury Under Scey. Julian B. Baird last week appealed to the nation's life insurance companies to step up their buying of government bonds. His words echo a general plea made by his boss, Secy. Robert B. Anderson, at the convention of the American Bankers Assn. (BW–Sep.27'58,p146), but Baird specifically called on the life insurance companies for help.

Despite these high-level appeals, few life companies are prepared to put new funds into government bonds. Over the past five years, the life companies have been net sellers of governments; their holdings have fallen steeply from 46% of their assets in 1945 to 7% last year.

Changing Patterns—Basically, the insurance companies have been selling off Treasury issues so as to secure the higher yields available elsewhere. They have been big buyers of mortgages, corporate bonds, and the tax-exempt securities of states and municipalities. And they have slowly stepped up their buying of common stocks—again aiming at safe, high-yielding issues. The result, as the table above shows, is a change in the pattern of insurance companies' investments.

This year, it is estimated that the pattern will continue to change. The life companies will reduce their government holdings by another \$200-million. That's a smaller reduction than in recent years—largely because their portfolios are already pared down. At the same time, they will add some \$300-million to their tax-exempt holdings, against a \$100-million increase last year. Net purchases of stocks are ex-

pected to run about \$200-million, compared with \$100-million the year before.

• New Year Shifts—To some extent, their buying in 1959 will follow the same basic lines. But the investment policy committees of life companies plan some significant changes, and any shift will have an impact on the markets because of the huge sums involved.

The major shift will be away from mortgages, principally government guaranteed FHAs and VAs. Insurance companies don't like to buy these mortgages at discounts; so when money is tight and conventional mortgage rates rising, they do not snap up the FHAs and VAs. Instead, they buy conventional mortgages and private placements of corporate bonds.

Private placements—loans negotiated directly by borrower and lender—are secure and bring in high returns. Moreover, they can be tailored to suit the life companies. This is important because the rate at which life insurance liabilities come due can be determined to a considerable extent in advance. By utilizing private loans, the companies can have their assets mature at the same rate as their liabilities. Thus, these loans make up more than 60% of life insurance lending to business and industry, and they will be a big factor next year.

Borrowing Spree—The rush to privately placed loans is on already, though it doesn't show in the table above. There's a long lead time between the committing of the funds and their actual disbursement. And private placements are relatively low this year be-

cause the recession put a damper on borrowing.

However, since late spring many medium-sized corporations—the chief customers of private placements—have been hunting for long-term funds, according to Richard K. Paynter, Jr., executive vice-president of the New York Life Insurance Co. "This summer has been one of the busiest we have ever known," he says.

The current concentration of the life companies on private placement points up the need for flexible investment policies. Frank J. Hoenemeyer, Jr., of Prudential Insurance Co.'s bond department, puts it this way: "We're not paid to sit around here and buy Triple A bonds. We have to go out and get the best deals available."

• Bonds Shed Glamor—This search for the best deals available goes a long way toward explaining the industry's attitude toward Treasury bonds. Since the war's end—and particularly before the Federal Reserve stopped pegging government bonds in 1951—the life companies have been heavy sellers of governments. This selling cycle may now be gradually coming to an end; the \$200-million net sales of governments estimated for 1958 will be the smallest in 10 years.

But the companies say this doesn't mean they are about to reverse direction and make sizable purchases. The reason is that a government bond's brightest attraction—the fact that it can be readily converted into cash—means very little to life companies. Historically, they have always collected far more cash annually than they have had to pay out. So it's not so important for them as for, say, banks to hold easily marketable securities—and government bonds thus aren't necessarily the best available deal.

• Shy of Mortgages-The same applies



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### "... life company purchases of common stocks are concentrated in scarce blue-chip industrials ... demand helps push their prices up . . ."

STORY starts on p. 140

to the industry's present reticence over investing heavily in mortgages. Mortgages, of course, are a staple in every life company's portfolio; the companies regularly plow some of their investment yields right back into mortgages.

Mortgages are particularly enticing during periods of easy money, when they offer a handsomer premium than other forms of investment. But now that credit is tightening, mortgages in general are less alluring, because conventional 'mortgages usually adjust slowly to changes in interest rates. They haven't lost all their charms, but the buving will be slower.

Over the past few years, there have been big shifts in mortgage-buying habits. In 1956, the life companies put 53.5-billion–60% of their purchasing—into mortgages. This year, the figure is expected to be only \$2-billion, or 39%. Net acquisitions in the first seven months of 1958 were the lowest for any comparable period since 1953.

• No Time to Switch—Money was easy early this year, too, and for that reason the life companies should have been busily collecting new mortgages. But their commitments had all been made last year when funds were still tight. Before they had time to switch signals, credit tightened again. Next year, however, they won't shun mortgages so pointedly, even if credit becomes tighter still. Most companies have big investments in either correspondent networks or regional offices to recruit mortgage business, and they don't want to let these relationships wither.

However, mortgage loan officers do prefer conventional loans, in which the borrower posts substantial equity. With government-guaranteed loans requiring little or no downpayment, there's always the danger the borrowers won't be able to keep up carrying charges. And life companies don't want to be forced into a lot of foreclosures, even when their money is safe. They look on foreclosing as bad public relations.

 Taking Up the Slack—If the swing away from mortgages creates any slack, the boomlet in the private placement market should more than make up for it. But no one industry will be receiving the bulk of this money, because each life company tends to develop its own outlets for funds.

Metropolitan Life Insurance Co., for example, two years ago focused heavily on financing oil tankers, most of them under lease to a major oil company for their entire useful life. This

way, the Met was able to buy the indirect obligation of a top company at an interest rate paying it \(\frac{1}{2}\) of 1% to 1% more than a bond of the same concern in the open market. These loans have slumped as the need for tankers tailed off after Suez. But they are still a popular type of investment for a number of life companies.

Other life companies are beginning to use a financing device long common in the open market—the combination of rights or warrants to purchase common stock at a discount with the sale of debentures. The Prudential, for one, acquired rights to purchase stock in the Orangeburg (N. Y.) Mfg. Co. when it lent the company \$2.25-million.

· Market Impact—This trend is significant because it demonstrates how the life companies are looking ahead to the day when common stocks might make up more of their portfolios. Despite the easing of some legal restrictions over the past five years, life insurance companies still trust only a tiny portion of their investment total to common stocks. Even the Pru, leader in the fight for variable annuities (BW-Iun.28'58. p110), hasn't stepped up its buving of common shares this year. Equitable Life Assurance Society says it is "not in the equity market at all," and one big New England company sold more stock than it bought each month this year until September.

Though the life companies spend relatively few dollars on stocks, their impact on the market is still substantial. For the purchases are concentrated in a small clite of blue-chip industrials, and usually the buying is for the long run. This means that the floating supply of these blue chips dwindles—and with the life companies holding a lot of shares, demand for the remainder tends to push their prices up.

· Into Tax-Exempts-Lately, the life companies have been beginning to make their weight felt in still another investment field-tax-exempt municipal bonds. The reason is the likelihood that after years in the works, revisions in the tax laws will be passed soon to make life companies liable to more taxes. Some of the smaller companies -particularly worried about their prospective tax bills-are starting to buy taxexempts in order to maintain their overall rates of return. The big companies have yet to follow suit, but municipal bond dealers say if they do this buying could be a new built-in stabilizer for the municipal bond market. END



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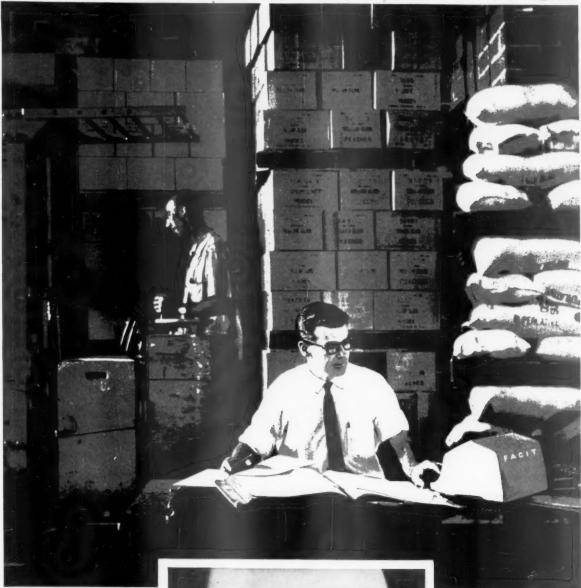
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# In the Markets

# Fed Hikes Margin Requirements to 90% As Credit Purchases of Stock Rise

Apparently alarmed by the big increase in stock trading volume and a steady rise in the use of credit for stock purchases, the Federal Reserve Board this week hiked margin requirements from 70% to 90%, the highest level since 1946, when margins were 100%.

Stock market credit has been increasing ever since last January, when margins were reduced to 50%. Credit extended totaled only \$3.5-billion in January, but jumped to \$4.29-billion for September, a record high.

The move was somewhat of a surprise, but there had been speculation that an increase was under consideration. It appears that rising volume and increased use of credit, rather than the climb in prices, were the chief reasons for the move.

Many brokers feel that the new margin requirement will put a brake on a new rise. But few think that it will, by itself, cause a large-scale decline. They reason that volume is more likely to be affected than prices. As one broker puts it, "It will slow down the big rises, which make for big falls."

# Too Much Money Goes Into Stocks, Says Head of Mutual Bank Group

Institutional investors were warned this week by one of the nation's top savings bankers to stop pouring undue amounts of money into equities. William A. Lyon, president of the National Assn. of Mutual Savings Banks, pointed out that, "although the stock market has been zooming, new common stock offerings by corporations have fallen to a level less than half of last year's figure."

The result, said Lyon, is that a large and growing amount of money is "trying to get into an equity market where share capital of corporations is not growing correspondingly." He stated that this could only lead to inflation in stock prices. And he added that the stock market now—rather than reflecting inflationary tendencies—is proving to be "one of the prime originators of inflationary fears."

## Wave of Profit-Taking Slaps Stocks Down After Six-Month Rise

The stock market this week suffered its first significant setback since it rallied from the recession lows reached during the spring. On two successive days, volume soared above the 5-million share mark, and the Dow-Jones industrials average dropped 10 points. It was plainly a long overdue technical correction, due largely to profittaking. Most professionals feel that the market will not

dip more than 5%, which would make this a minimum

Technicians reason that, with the economy moving up, there is no basis for a sharp fall. They feel that today's high is much more solidly based than the peaks reached in 1956 and 1957, when there was real doubt about the economic outlook. As John W. Harriman of Tri-Continental puts it: "As business improves, corporate earnings will increase under the twofold influence of lowered costs and higher volumes. Dividends that were previously in jeopardy will be assured and in some instances increased."

The huge volume registered in the decline suggested that the market may be in for still more profit-taking It is clear that once the rally got under way, a growing number of investors, both institutional and individual, began buying in. Now that the rally has lasted more than six months, some holders are taking long-term profits, but there appears to be no shortage of investors who are willing to buy in.

# Stock Exchange Takes Steps to Curb Excessive Speculation in Governments

In a bold move to prevent the kind of excessive speculation in government bonds that took place last spring (BW-Sep.27'58,p45), the New York Stock Exchange is requiring member firms to set aside a share of their capital if they are carrying Treasury obligations for their own account. Up until now, brokerage houses could carry governments without any capital charge, a main factor in their heavy participation in the bond market.

Exchange officials say privately that the change is necessary because government bonds are now subject to wide fluctuations. Since the change is not a constitutional one, member firms won't get a chance to vote on it. Some of them are opposed to the move. By assessing the firms with a "penalty charge," it cuts down on their excess capital, which governs the credit they can extend and the amount of securities they can hold. Thus the regulation could slow down their hunt for new business.

# SEC Cracks Down on Two Brokers For Fraudulent Claims in Stock Sale

On the heels of a Securities & Exchange Commission announcement of a new "get-tough" policy on "boiler room" operators, SEC's New York office cracked down this week on two brokerage houses, Albert & Co., Inc., and I. B. Morton & Co. They were accused of making fraudulent claims in connection with the sale of Varipack Corp. common stock.

While the action at present is a civil one, demanding an injunction against the sale of the stock, insiders say that this case may be shipped over to the Justice Dept, for criminal action. If it is, this could be the opening shot in a drive to cut off the sale of stock through dummy accounts in Canadian brokerage houses—which the SEC says was the device used by Albert and Morton to evade U.S. disclosure and registration requirements.



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# Labor Goes on Political Defensive

McClellan probe disclosures and "right-to-work" drives put unions in a top spot as a campaign issue.

Despite confident talk, leaders are worried, fearing loss of political support even in own ranks.

 Fighting to hold present lines, labor aims its guns at "right-to-work" proposals, with Ohio as key.

The third of a series of advertisements placed by the Committee for Constitutional Government, Inc. in national newspapers this week carried the headlined slogan: "How to Stop Reuther." The text, in full pages, explained that the ads are intended to focus attention on "the well-organized attempt of labor union politicians, as exemplified by Walter Reuther, to control the next Congress."

In its "call to action," the latest ad

warns:

"At least 176 members of the present House of Representatives were elected with union help . . . the labor bosses need only 44 more congressmen to have an absolute majority in the lower House, and . . . the Reutherites are hard at work in 300 Congressional districts electioneering for Democratic or Republican candidates favorable to them."

• Major Issue—The ads in New York and other major cities underscore the fact that labor and its leaders are a major issue in this year's election. Although Reuther is probably suspected and feared more, politically, than any other union official, his growing involvement in this year's campaign is more as a symbol than it is personal. Reuther may be the pinpointed target, but the broad attack is on labor generally, based on an avowed fear of "political power [that] has grown steadily with labor's vast increase of economic power."

To the unions, the political attack the greatest they have yet faced—is a part of a vast anti-labor campaign. To many in management, it is a reaction to the disclosures coming out of the Mc-Clellan committee's probe into the misuses of union economic powers.

Whatever the reason for it, labor's emergence as one of the top issues in the 1958 political campaign has put unions further on the defensive than they have been since 1947. The national appeals to voters to curb labor have been so strong and widespread—and, unions feel, so subtly persuasive—that the unions are campaigning now more to hold their present position than to extend their lines further.

• Difference—Eleven years ago, the old AFL—jolted by the passage of the Taft-

Hartley Act—set up political machinery to work with the CIO in a fight to repeal the new labor-management law. The repeal campaign was a dismal failure, but the broad labor political program that began in 1947 has continued since, never spectacularly successful—and sometimes futile—but with enough successes through the years on social and labor issues to keep it potent.

Generally, over the decade, the campaigning has been for something newmore favorable labor legislation, a higher minimum wage, broader social security, and a wide range of similar goals.

It's different this year. No matter how confident their talk may be, the union political strategists are worried. They feel that they have a tough job ahead, in the remaining weeks before the election, if they are to counteract a gathering attack.

Goals—Their specific goals for 1958:
 To defeat such candidates as

• 10 defeat such candidates as Arizona's Sen. Barry Goldwater, running for reelection, and Sen. William A. Knowland, who is seeking the California governorship. With other "unfriendly" candidates, Goldwater and Knowland have been campaigning hard against "big labor," and unions consider them a threat to labor's status quo.

 To elect "friendly" candidates as a bulwark in the next Congress against demands, expected from both Republican and Democratic conservatives, for work retriging labor laws.

more restrictive labor laws.

And, importantly, to defeat proposed "right-to-work" laws, which would bar union shop contracts, in the six states where they are on election ballots: Ohio and California, especially, and also Washington, Idaho, Colorado, and Kansas,

• Fears—Despite growing signs of Democratic political gains across the country, the labor politicians are greatly concerned. Privately, they admit that they are afraid—very much afraid—of the public, because of the stigma on all labor from the Senate racketeering hearings, which made headlines during much of this year.

Union failures in organizing during 1958 have been traced, in many instances, to the aftermath of the Me-

Clellan inquiries. The big question is whether voters will react in the same way that potential unionists did to the revelations. The hearings delved into the affairs of the Teamsters, Carpenters, Bakers, Operating Engineers, and other unions in which corruption and democratic abuses were bared, and into political activities of Reuther and the United Auto Workers and the union's use of its economic power.

The worry isn't limited to the reaction from the outside of labor. There is a mounting uncertainty about the willingness of union members to give a solid backing to union candidates and causes this year. In regional meetings, labor political strategists have borne down hard on the consequences of rankand-file apathy, the lack of cooperation in fund-raising—which sought \$1 from each unionist for "political education"—and in campaigning.

They didn't add, although they could have, that there is a fear that GOP and business charges of "labor bossism" may be spreading doubts within labor's own

ranks.

The net result of all this is that labor is campaigning with outward confidence, but with considerable inward misgivings.

#### I. Labor's Campaign

Labor leaders are still generally backing Democratic candidates—and they are counting on an election trend to the Democrats this year. They say that in key industrial areas, lingering recession issues of unemployment and high prices are working for the Democrats.

If a Democrat sweep does develop, union leaders know that, though they won't get much of the credit, they will in such a case have more influence on the labor-regulating legislation written by the next Congress.

 Ohio the Key-But labor leaders are fighting mainly to ward off what would be the biggest blow to them-voter approval of "right-to-work" laws in referendums, particularly in Ohio.

"If Ohio votes right-to-work," says one union official, "it would hurt us more than anything since Taft-Hartley. It would mean a state with one of the biggest union memberships voting against union security." "Right-to-work" victories in any other states would hurt, especially if labor's political friends pick up ground in the election while the unions are losing ground.

In Ohio, union politicans put forth their biggest off-year effort to get members registered, and got a record-breaking turnout. When election day comes,



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"... labor leaders are still bruised from their drubbing in the 1950 election of Sen. Taft in Ohio ..."

STORY storts on p. 147

they'll be equally vigilant about getting out the vote.

But there's an undercurrent of concern. Labor leaders are still bruised from the drubbing they took in the 1950 election of the late Sen. Robert A. Taft in the face of an all-out labor campaign against him.

Some private polls back their worry. One poll, conducted quietly by the unions, shows that 40% of the voters are still undecided on such labor issues as "right-to-work" legislation.

• Tied in Knots—While Ohio is the key, labor unions are working hard in the other states. They see good chances of victory in Washington and California, but aren't so sure about Colorado, Idaho, and Kansas. The odds are good that one or more of these states will adopt laws barring union-shop contracts.

• COPE's Chances—The "right-towork" campaigning has held the closest attention in the area of labor politics this year. Otherwise, AFL-CIO's Committee on Political Education has been working as quietly as possible in Congressional districts across the country, with its emphasis in doubtful areas.

If COPE's activities in these areas aren't so powerful as some critics may say, they can't be disregarded. This week, for instance, political observers in Arizona reported that Sen. Goldwater, one of Reuther's severest critics, is trailing a Democratic opponent, Gov. Ernest W. McFarland. Although Arizona is not a strong labor state—its workers are only about 28% organized into AFL-CIO unions—the intensity of labor's attack on Goldwater is a factor.

#### II. National Issues

Early in the present campaign, the Republican national leadership moved carefully—where it moved at all—against labor. It didn't want to do anything that might queer any thin chances of union backing for GOP candidates (page 154). Now, from the White House on down the line, the attack on labor is on. The reason is said to be a concern over labor's political influence in many states.

In a recent statement after a toplevel conference, Republican leaders charged:

"More today than ever before, the Democratic Party is dominated by certain politico-labor bosses and leftwing extremists." So, the alternative to a



Yes, we chose Santa Clara County \*



Republican victory is "to go down the left lane which leads inescapably to socialism." The GOP leaders said.

· Legislation-The union influence is frequently cited as a reason for failure of the drive for tighter labor curbs in Congress earlier this year. Republican leaders accuse the Democrats of "carrying on a premeditated campaign to sabotage labor reform measures.

Secv. of Labor James P. Mitchell promises a new White House proposal in the next Congress for a reform measure that would amend the Kennedy-Ives bill by including a ban on blackmail picketing and secondary boycotts, and giving more powers to the Labor Secretary to investigate charges of union abuses.

Even the Democrats, led by Sen. John F. Kennedy of Massachusetts, who helped write the bill, plan to return to Congress for more reform attempts. Kennedy promises to resurrect his original bill, supported by the AFL-CIO, for another vote when the new Congress assembles. He charges Mitchell caused its defeat in the last session.

• Clash-The professional politicians involved in labor issues have heavy support. Labor's COPE activities are being countered by the most intensive political campaigns ever by the Chamber of Commerce, the National Assn. of Manufacturers, and business generally

(BW-Oct.11'58,p125).

These political drives have been stepped up sharply in recent weeks. COPE, which is having a hard time collecting a voluntary \$1 per union member, is spending an estimated \$450,000, with much of it going into "right-to-work" states. It's also distributing 10-million copies of a Congressional voting record, with its analysis of "right" and "wrong" votes of the candidates.

On the other side, the management associations are promoting an active "get into politics" campaign for the businessmen. Besides the Chamber and NAM efforts to spread the fight against the union shop, they have set up a political school program for businessmen to offset labor's political role.

In many major companies, political participation is openly promoted. Says Gulf Oil Corp.'s senior vice-president, Archie D. Gray, "If we are to survive. labor's political power must be opposed by a matching force-among the corporations that make up American business." This attitude is echoed in many other companies.

AFL-CIO Pres. George Meany told a recent chemical union convention: "We find now that the employer has decided that the place to curb the trade union movement, the place to do battle . . . with the workers and their unions is the legislative field." END



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#### Mr. H. Myrl Stearns, President of Varian Associates...



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# Westinghouse "Security" Plan

Company refuses to discuss SUB, but comes up with complicated counter-offer that it claims is a better deal for workers. IUE scorns the bid at bargaining table.

Westinghouse Electric Corp. this week joined the General Electric Co. in a flat refusal to negotiate a supplementary unemployment benefits program for its employees. Opposed in principle to SUB as it commonly exists in auto and steel contracts. Westinghouse offered to its unions what it says is a better security plan.

Westinghouse's proposal during a contract reopening differs substantially from GE's savings-investment plan offered to unions in earlier bargaining (BW-Sep.6'58,p54). But, as in GE, it places its stress on individual rather than group interests. And it echoes the GE insistence that employment costs must not be lifted beyond present con-

tractual commitments.

• Firm Stand-This means that part of raises under existing five-year contracts would be put into the savings program, not paid in cash. As happened in the GE bargaining, the International Union of Electrical Workers rejected this in

heated words.

Westinghouse denied that employees would lose under the plan. It stood firmly on its offer, contributing to the developing trend in management toward harder bargaining where labor costs are concerned (BW-Sep.27'58, p39). The corporation told the union that it has made its offer; if the proposal is finally rejected, the contract will be carried out as it now stands.

· SUB-GE and Westinghouse contracts negotiated in 1955 run to October, 1960. Reopenings this year are limited to "employment security" is-

The key unions, particularly IUE and the United Electrical Workers (Ind.), demanded supplemental unemployment benefits, some form of guaranteed wage, or a shortened work week. In the case of IUE, demands on first GE and then Westinghouse made a potentially costly eight-point list. GE called them "old and long-familiar demands," turned down in 1955.

At the start of its negotiations, GE offered its savings-investment plan as "far superior" to SUB and an answer to "employee desires [for] protection during times of adversity." UE and IUE rejected the GE plan, now in effect for more than 107,000 employees not under national labor contracts.

· Take-Off Point-Westinghouse started from the same basic position as GEfirm resistance to "pattern" SUB-and

worked out its own employment security program. This is an intricate fivepoint plan that Westinghouse says will 'match and exceed SUB." The corpora-

tion's proposals:

 Westinghouse would encourage employee savings through a program under which employees may allot up to 4% of their earnings to individual savings accounts; the corporation would add 15% to the total accumulated over three-year periods. Employee participation would be entirely voluntary. Savings would be invested in Westinghouse common stock, U.S. "E" bonds, or both.

• The corporation would establish separate "emergency fund" accounts for employees, individually, financed entirely by Westinghouse at a cost of 2.5% of each employee's monthly earnings. These accounts would be built up to a minimum \$600 each, but could accrue beyond that should an individual want additional protection against extended lavoffs or other lost time. The alternative to a larger "emergency fund" would be to transfer the corporation's 2.5% payments into the employee's personal savings account.

· Westinghouse would set up two loan programs. A short-term plan, in effect until Jan. 31, 1961, would allow an employee to borrow up to 5% of his annual pay in certain emergencies; this is intended to cover the employee while his "emergency fund" builds up to the \$600 minimum. A second, permanent plan would let employees draw on their personal savings account up to its face value without sacrificing the employer contribution.

· The Westinghouse pension program would be improved, with the corporation absorbing any added costs.

· Westinghouse would set up a separation pay plan for those who lose jobs if plants or offices are shut down

As Westinghouse figures it, employces would benefit more under its proposed employment security program than they would under the unionsought "pattern" SUB plans. For one thing, it says, emergency funds would accrue faster and each employee would have a vested interest in the money.

· Emergency Fund-The key to the security program offered is the "emergency fund" that would be created by Westinghouse for each employee.

Under the corporation plan, with-

drawals could be made from the funds accrued in a worker's account at a maximum rate of \$25 during layoffs and in other emergencies. At the minimum \$600 level, this would mean payments (the equivalent of SUBenefits)

continuing for 24 weeks.

When the "emergency fund" total reaches \$600 or 10% of the employee's current annual pay, whichever is greater, the 2.5% Westinghouse payments over a one-year period may be transferred to the individual's personal savings account, to be added to the money accumulating from voluntary payroll deductions of up to 4% of pay.

This transfer would be optional. The employee may tailor his security program to fit his own conception of what he needs. For instance, he can let his "emergency fund" build up to \$1,200 (double the minimum) and have the assurance of more or longer help in the event of layoffs. Or, by transferring the Westinghouse 2.5% he can build up long-term savings-and get a larger bonus under the corporation's savingsmatching program.

· Separation Pay-The proposed separation pay program would provide an employee a lump sum payment, based on a minimum number of years of service, at the time a plant or office is shut

down permanently.

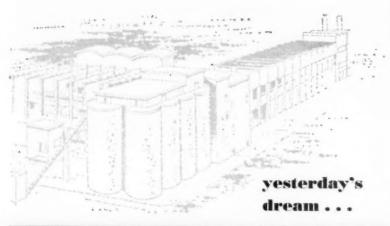
The employee then collects unemployment compensation for as long as it is payable. After that, he is eligible for further payments by Westinghouse on a weekly basis until they total the amount of his lump sum payment.

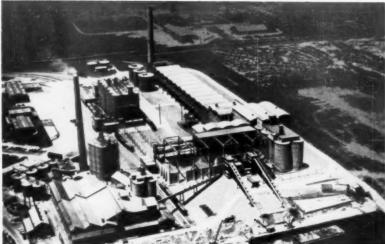
• IUE Rejection-IUE's Local 601 at East Pittsburgh, one of the corporation's largest bargaining units, rejected the five-point offer as "inadequate." The local's officers also objected to Westinghouse's proposed "rearrangements" of its contractual money commitments.

To finance the security program, without boosting costs, Westinghouse would reduce 3.5% general raises scheduled for October, 1958 and 1959, to 2.5% for production workers; 3¢ now being paid as a cost-of-living addition to wages would be converted into employee benefits, and some scheduled reductions in employee contributions to the insurance program would be eliminated.

According to IUE, these changes would cost employees 14¢ an hour in wages over the remainder of the contract term, while only about a dime would be added in benefits. Westinghouse figures the program offered would add to the net cost of the remainder of its five-year contract, even without figuring in the 15% bonus to be paid after three years on voluntary savings. END

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# Chemical Fusion

Oil-Chemical unions move toward a merger. It could happen next year, but probably will come later.

The two AFL-CIO unions in the oil and chemical industries have taken initial steps toward a merger, but the "one strong union" that is their goal is still far from a certainty.

The International Chemical Workers last week approved, 2 to 1, a merger resolution similar to that passed earlier by the Oil, Chemical & Atomic Workers (BW–Oct.4'58,p100). A timetable for uniting the two unions has now been set up.

Closely Watched—To many employers in the industries, even the progress made so far by OCAW and ICW is a matter of concern. The merger resolutions stipulate that, while unity is being negotiated, the unions will coordinate bargaining, organizing, and educational work. The oil and chemical industries will keep a sharp eye on how this is done.

The collaborations could be important for two reasons, both worrisome for employers:

• One objective of the proposed merger is companywide bargaining. This isn't the present pattern in the industries. Some strong locals in both unions oppose it, preferring to negotiate on their own. But, in recent conventions, these locals were outvoted. Merger advocates stressed a need for unity, to help OCAW and ICW "consolidate their full economic power at bargaining tables," company by company, as auto and steel unions do.

• Another goal is coordinated organizing, to extend combined OCAW and ICW membership from less than 300,000 now to a fuller coverage of the estimated 1-million workers in the industries. About 500,000 are nonunion, and some 200,000 are in independent unions. A merger probably would bring many of the independents into the united ranks almost immediately.

Organizing has been hampered in the past by OCAW-ICW rivalry. Now, leaders of both unions are committed to work together.

to work together.

• Delays Possible—Even so, technical problems involved in a merger might upset the timetable. Jobs are at stake, and there are sharp differences in some basic OCAW and ICW policies. Officers of both unions are "optimistic" and not only willing but even anxious to bargain in good faith. Yet, as one officer said, "Winding this up could be completed in one year, or it could require three or four years." END

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# In Labor

# Five Years Makes a Difference In Labor's View of James Mitchell

James P. Mitchell became Secretary of Labor five years ago last week. His reception by unions was critical and hostile. He succeeded the late Martin Durkin, the plumbers' president who quit the Cabinet in an angry dispute with the Administration. Moreover, Mitchell

was a businessman-the first to head the Labor Dept. in its 40-year history. Unions called the appointment an "incredible" choice.

Today, Mitchell still isn't all that unions would prefer a Labor Secretary to be. He doesn't always agree with labor, or labor with him. At the recent United Steelworkers convention. a few delegates booed his



appearance. But, he got an ovation when introduced as "our good friend," and as an "exceptionally qualified" official who has shown "the greatest understanding of labor's problems and labor's goals."

The USW reception wasn't unique. Not long ago, AFL-CIO Pres. George Meany, who hotly criticized Mitchell in 1954, expressed a common labor view when he said Mitchell "is making a splendid record."

How? Mitchell has worked doggedly to make the Labor Dept. more effective. He bucked conservatives in the GOP by recommending, early this year, anti-recession steps when the Administration was standing pat, and helped labor's fight against "right-to-work" laws by defending the union shop. Moreover, Mitchell urged increases in unemployment compensation and workmen's compensation, and "improvements" in wagehour regulations. He has differed from labor views over what should be done by law to police unions; he goes further than labor likes, though not so far as the tight curbs sought by conservatives of both parties.

While Mitchell's record has built up his prestige and popularity with labor, it has led to some distrust in GOP circles. Underscoring this, a labor political spokesman recently said pointedly that Republican candidates can have "thin hopes" that Mitchell's gains will help them "under present circumstances" (page 147).

# Unemployment Shrinks by 600,000 In September; Employment Off Seasonally

Unemployment dropped in September from 4.7-million to 4.1-million, the lowest level of the year (page 160). At the same time, total employment fell seasonally

to 64.6-million in what the Labor and Commerce Depts. called the "customary withdrawal of students from the labor force."

The number of jobless, seasonally adjusted, was 7.2% of the labor force in September. At the peak in August, it was 7.6%.

George Meany, president of AFL-CIO, agreed with government spokesmen that the decline is noteworthy, but warned that statistics indicate that 70% of the production lost in the recession has now been regainedbut only 25% of those idled have been reemployed.

Other significant statistics show:

Weekly hours of work in manufacturing rose seasonally in September, to 39.8 hours, as a result of more overtime. At 39.8, the work week is almost back to the 1957 level for mid-September but is an hour under 1955 and 1956 marks.

Average weekly pay of factory workers rose to a record \$85.17 in mid-September, up 82¢ as a result of longer hours, with more overtime, and increased hourly pay.

Factory hiring and lavoff figures are showing "a continued modest improvement," according to government reports, with gains especially significant in auto plants and steel mills and among home appliance manufac-

# U.S. Unionists Relax Rules to Install Japanese Fixtures in New York Store

Tokyo's Takashimaya Department Store will open a New York branch next week, and the interior of the building on Fifth Avenue is Japanese. Woodwork and fixtures were designed and prefabricated there, imported for the store.

American craftsmen have rules against handling work done outside the close-knit Building & Construction Trades Dept. of AFL-CIO. For a time, there was a question of whether the imported fixtures would be installed.

No troubles developed. The Takashimaya union in Japan certified that the imports were union-made, so AFL-CIO unionists agreed fraternally to install them.

# **Autonomous Branches of Seafarers** Sign One Pact Instead of Three

A single contract last week replaced separate agreements that Pacific Coast shipowners formerly signed with three autonomous branches of the Scafarers' International Union. The three-year agreement is another step toward a merger of the Sailors' Union of the Pacific, the Marine Firemen, Oilers & Watertenders, and the Marine Cooks & Stewards into a single SIU Pacific Coast District, say union spokesmen.

The three unions already had merged their separate pension plans. The new contract consolidates vacation

The agreement freezes seamen's wages for two years, until a wage review in September, 1960.



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# PERSONAL BUSINESS

BUSINESS WEEK OCT. 18, 1958



In tax figuring, the stock dividend causes far more than its share of confusion, a leading tax adviser said recently.

This goes on year after year, it seems, because of misunderstanding among investors as to the Form 1040 treatment of a dividend that is paid in stock instead of cash.

Generally, you pay no tax on this kind of dividend unless it is "elective" or, in some cases, paid to discharge preferred dividend arrearages. If the dividend is elective—where you have a choice of taking the corporation's shares or taking cash—you pay income tax even if you decide to take the shares. Tax is levied at the ordinary rate.

Suppose XYZ Corp declares an elective dividend of \$20 per share on common, or one share of common for each share outstanding. If you elect to take the stock, you declare \$20 per share as ordinary income.

What happens if a corporation declares a stock dividend, and you're entitled to only a fractional share? Say you hold 10 shares of XYZ. A 4% stock dividend is declared—that is, one full share for every 25 outstanding. This gives you scrip certificates representing 3/4ths of a share.

Here the same basic rules apply: If the company will exchange your scrip for cash, you pay income tax—even if you retain the scrip. But if you get a fractional share that must either be held or sold on the open market, the dividend is taxfree—even if the corporation acts as agent for the sale.

What about "cost basis"—the cost-per-share that you use to determine taxable profit when you sell stock received as a dividend?

If the dividend is taxable, your cost basis for the new stock is its fair market value at the time your old stock goes ex-dividend. Say you hold 1,000 shares of XYZ for which you paid \$10,000. You get a dividend with the election to take cash or stock—say, one share for every 100 held. You decide to take the stock—10 shares. The ex-dividend market value is \$15. Cost basis of your new stock is then \$150 (10 x \$15); cost basis of your old shares remains \$10,000.

If you receive a tax-free stock dividend, cost basis is found by allocating original cost between the original holding and the dividend. Here are the two basic situations:

- You get the same class of stock, for example, common on common: Say you paid \$1,100 for 100 shares of XYZ common, and get a taxfree dividend of 10 common. To determine the new tax basis, you take your total shares, 110, and divide into original cost, \$1,100. New basis for all shares: \$10 per share.
- You get another class of stock, i.e., preferred on common: Say you paid \$1,000 for 100 shares of XYZ common, and get a taxfree dividend of 10 preferred When the stock goes ex-dividend, the market value of the common is \$9; the preferred, \$30. Thus, the market value of your common is \$900, and your preferred \$300—total \$1,200. Allocate 9/12 of your \$1,000 original cost, or \$750, to your 100 shares of common—thus, new cost basis becomes \$7.50 per share. Allocate 3/12, or \$250, to your 10 shares of preferred—so the cost basis here is \$25 per share.

Though you may not be taxed when you receive a stock dividend, you report a sale in the usual manner. The important question: Is the sale entitled to long-term capital gain treatment? If so, it means a maximum 25% rate, as against your ordinary income rate.

# PERSONAL BUSINESS (Continued)

BUSINESS WEEK OCT. 18, 1958 This depends, of course, on the time you held the stock—if it's more than six months, you are taxed at the lower rate. On dividend stock, you get a break: The holding period is measured from the date you acquired the original shares—not the later date when you received the stock dividend.

Want more political knowhow? In step with increased interest in the effective participation of businessmen in politics (BW—Oct.11'58,p125), the U. S. Chamber of Commerce is preparing a course in political "mechanics" for use by small groups of businessmen.

To be ready by January, the course will be divided into eight weekly sessions, lasting from 1½ to 2 hours. Getting out the vote, selecting candidates, precinct duties, political club organization, and campaign participation are among the themes.

Information is available from the Chamber's Business Relations Dept., 1615 H St., N. W., Washington 6, D. C.

U.S. air fares up: Round-trip and family-plan plane fares will be increased Monday. effective through July 31, 1959

CAB approved requests by eight major lines to eliminate the 5% discount for round trips. All 25 domestic trunk lines and local service airlines are expected to file for the increase. The 5% discount is also eliminated in circle trips (returning by a different route) and open-jaw trips (returning from a city other than the outbound destination). Free stopovers are also dropped.

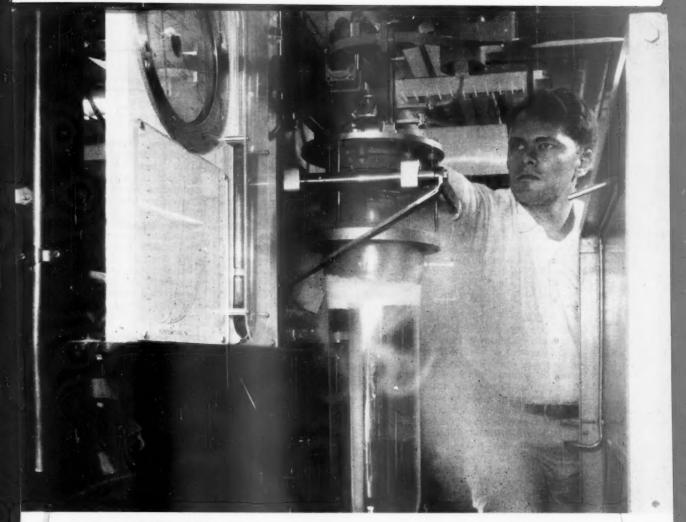
The new family-plan discount will be one-third rather than half fare for each family member, provided the family head pays full fare.

You may want to pick up a copy of Amy La Follette Jensen's The White House and Its Thirty Two Families at your bookstore—but you may not want to put it down. This new Presidential "family album," with nostalgic illustrations and a lively text, is just out (McGraw-Hill, \$12.50).

American Express credit card holders will get new mileage from their membership. Service and parts soon will be chargeable at Chrysler, Ford, and General Motors dealers, coast-to-coast.

Meanwhile, Northwest Orient Airlines claims a first: an international airline credit card requiring neither deposit, application fee, nor carrying charge

Potpourri: For a breathtaking view of New York City combined with good food, visit the new restaurant, Top of the Six's, Tishman Building, 666 Fifth Avenue . . . If you're an "average" citizen, you probably see your physician about five times a year, the Health Information Foundation says. Persons in low-income groups now see a physician almost as often as those in high-income groups. . . . Deer hunters report success with the Indian-type deer call, marked by a "fluttering" quality similar to a deer bleat. A tip: Wait 10 to 15 minutes before repeating the call. . . . Fur for the male: Sulka of Park Avenue has introduced a broadtail vest, lined with bright Chinese red satin, for formal occasions (\$125)



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Basic and applied research at Texas Instruments covers solid state physics, materials, devices, and earth sciences, while concentrating on TI's major areas of interest — semiconductors, electronic components and systems, military apparatus, data handling, and geophysical exploration techniques. TI regards its substantial R, D & E expenditure as "seed corn for the future."

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# How Good Are the Unemployment Figures?

FOR MONTHS now, whenever new unemployment figures have been released by the government, there has been a free-for-all among Administration spokesmen and their critics over whether the numbers show that unemployment is getting better or getting worse.

From May to June, for instance, unemployment increased from 4.9million to 5.4-million, while the seasonally adjusted unemployment rate dropped from 7.2% to 6.8%. Administration supporters took the drop in the rate as proof that unemployment was really shrinking; their opponents stressed the rise in actual unemployment, cracked that, if you were out of work, it didn't make you feel much better to be seasonally adjusted into a job.

Then, from July to August, total unemployment dropped from 5.3million to 4.7-million; Administration spokesmen hailed this as convincing evidence that the recovery was mopping up unemployment nicely. But their critics drew the opposite conclusion, pointing to the seasonally adjusted unemployment rate, which climbed from 7.3% to 7.6%-the highest level since 1941 except for one month in 1949 during a coal strike.

This week, the quarrel was renewed-with September figures showing a decline in unemployment from 4.7-million to 4.1-million workers, with the seasonally adjusted rate at 7.2%, still higher than first-quarter 1958 levels (page

THAT RAISES the question: Are the figures that frame this controversy any good?

The raw figure for the number out of work isn't too bad. It's derived from a sample survey of 25,000 of the nation's 50-million households. It is, of course, subject to what statisticians call "standard error." For the total unemployment figure, the standard error is 3% to 4%; this means that if the Census Bureau says there were 5-million unemployed in a given month, the chances are about 2-to-1 that the actual number of unemployed was somewhere between 4.8-million and 5.2-million.

But the seasonally adjusted unemployment rate, which the Census Bureau also computes, is considerably less reliable-especially right now, with total unemployment running much higher than it did from 1952 through 1956, the principal years from which Census derived its seasonal-adjustment factors.

Here's why it's less reliable: Census gets a raw unemployment rate by dividing total unemployment by the total civilian labor force. It then divides this raw rate by a special seasonal-adjustment factor to get the seasonally adjusted unemployment rate. When total unemployment is low, seasonal shifts produce wider swings in the raw unemployment rate than when unemployment is high. That's because the number of kids who leave school and enter the labor force in the early summer, or leave the labor force and return to school in the fall, runs fairly steadily from one year to the next.

So if, sav, 400,000 kids begin looking for jobs at the start of a summer when total unemployment has already been 2-million, this would mean a 20% jump in unemployment, which your seasonal factor has to offset. But if those 400,000 kids begin hunting for jobs when total unemployment is already 5-million, this means only an 8% increase in unemployment due to seasonal factors.

Thus, if you go on using the factor derived from the period of 2-million unemployed, you obviously distort seasonal effects in the 5-million out-of-work period. In early summer, the seasonally adjusted unemployment rate would be too low. And, vice versa, when the kids went back to school in the fall, the seasonally adjusted rate would be too high. That's exactly what the Census method did to the unemployment rate this summer and fall.

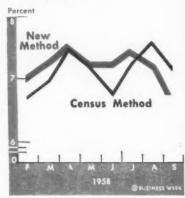
THERE IS, however, a simple way of getting a better seasonally adjusted unemployment rate. It still uses the adjustment factors that Census has published-but for the civilian labor force and for total employment, instead of for the unemployment rate. Those figures show far more consistency of seasonal variation in high or low

unemployment years than does the unemployment ratio.

Here's how the new method works: Subtract seasonally adjusted employment from seasonally adjusted civilian labor force, and take that difference as a percentage of the seasonally adjusted labor force. The adjusted unemployment rate you get that way doesn't jump around erratically like the Census figure. It appears, in fact, to reflect pretty much the way you would have expected unemployment, corrected for seasonal, to have behaved this year, as the chart below shows-

# **Unemployment Rates**

(Seasonally Adjusted)



Thus, when computed by the new method, the seasonally adjusted unemployment rate peaked at 7.5% last April, was down to 6.7% in September, where, on the Census method, the rate peaked at 7.6% in August, was still 7.2% in September.

Census is aware of the deficiencies in its present method; its technicians are anxious to change it. They may switch to the method above or to one more complex. But the decision for the present is to use the old method at least for the rest of the year-partly because Census doesn't like to change methods in the middle of a year, partly to avoid charges that it is using new tricks to fudge the figures for political reasons.

The Census Bureau has, however, warned its customers that its present method of seasonally adjusting the unemployment rate has

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On a muggy, 90F day in late summer. D. C. Transit System, Inc., caused Washington's biggest traffic tie-up since the last inaugural parade—with a parade of its own. To introduce a \$2.5-million fleet of air-conditioned buses, the company's ebullient head, millionaire O. Roy Chalk, staged a mile-long demonstration, with four bands, circus clowns, drum majorettes, assorted bathing beauties, and 20 motorcycle cops.

Then, to cap the festivities, he presided at a champagne party for 450. "I like to do things in style," explains

Chalk's flair for style has been a major factor in the amazing performance of D. C. Transit, which recently showed a 2% gain in passenger mileage at a time when all other transit companies in the nation were losing 5%. Since taking over the operation in 1956, he has installed new management policies inside and sparkling new paint jobs and equipment outside. He has led the company into the guided tour and limousine business, with pretty hostesses to give the spiel for tourists aboard a special air-conditioned sightseeing trollev. And he has dreams of helicopter service, de luxe commuter buses dispensing orange juice to late risers, and a monorail from Southwest Washington to the Pentagon. "If you're going to sell a product, you've got to let the public know about it," says Chalk.

Relative Unknown—Flamboyant tactics such as these propel Chalk and his company regularly into the news around Washington. Outside the nation's capital he is relatively unknown. Nonetheless, at 51 he is also a lawyer, a flourishing real estate man, and president and general manager of a lively little airline, Trans Caribbean Airways, Inc.—of which D. C. Transit is a wholly owned subsidiary.

Chalk, with 70% control of Trans Carib, is both owner and manager of the airline and the transit company. Trans Carib, originally nothing but a nonscheduled operation (though more profitable than many), last year became the first nonsked in 20 years to graduate. The Civil Aeronautics Board awarded a experimental three-year certification for scheduled flights between New York and Puerto Rico.

In both companies, Chalk runs the

show. He works through management committees, with only two top aides—I. M. Buckley, the airline's executive vice-president and treasurer, and lawyer H. M. Spear—overlapping from one company to the other. He is his own labor negotiator, public relations counsel, and agent in dealings with the government—which are many. In one week, for instance, he appeared before four different government agencies: the Interstate Commerce Commission, the CAB, and Washington's Redevelopment Land Agency, and Public Utilities Commission. "Half my time is spent dealing with government," he savs.

#### I. On Wings of Gold

At the moment, D. C. Transit takes most of Chalk's time, but his first love and best money maker is Trans Carib. He shuttles regularly between offices in Washington and New York—both studded with antiques and designed by his wife, who is Trans Carib's secretary—to keep tabs on operations.

Trans Carib runs two DC-6s (with a third being readied at Douglas), a DC-4, and two C-46s. Currently, about \$4-million of its vearly revenue comes from the New York-Puerto Rico run. Until last month, the bulk of another \$2-million a year was coming from charter flights, mostly toting servicemen and dependents abroad for the Military Air Transport Service.

Just recently, however, Trans Carib and most other small carriers lost out to Pan American and Trans World Airlines on bids to continue this service. Trans Carib hopes to make up for most of the loss by intensifying operations on the lush Puerto Rico run, Chalk hopes to see his airline net \$500,000 a year in the near future, has a DC-8 jet on order for 1960 to bring the total even higher, and has private dreams of expanding the company beyond Puerto Rico.

• Up Again, Down Again—Chalk started Trans Carib—after World War II, when hundreds of little airlines were sprouting—with \$60,000. He bought three surplus DC-3s and hired some pilots. The venture was an outgrowth of a wartime stint with the Navy's Bureau of Aeronautics. Before that, he had been practicing law with a specialty in real estate—he made his first money in New York properties.

Trans Carib's first efforts—hauling cargo from New York to Miami and South America—didn't turn out at all well. But Chalk cannily noted that



WISE IN THE WAYS of Washington since early in his career, Chalk spends much time dealing with government agencies.

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FOR TRANSIT LINE, Chalk treatment includes bright colors.



FOR AIRLINE, it calls for low fares, splashy advertising.

#### Story starts on page 163)

he scheduled carriers on the New York-Puerto Rico run were turning way passengers, at \$180 one way. So, with a characteristic splash of advertising, he dropped the fare to \$150 and legan filling five weekly flights to apacity. In 1947, he lowered the ariff to \$99; a year later it was \$75, and now it's a mere \$45. To keep up with the plucky nonsked, the trunk ine rivals had to go along with the atte cutting.

Over the Globe—Because the DC-3s are too small to be profitable, the ompany lost \$21,000 its first year. Chalk replaced them with a trio of DC-4s, installed extra seats, and exanded passenger services to South America, Europe, and Israel. At the peak, here were five nonscheduled European ights a week at a round-trip rate of 500. In 1947, with sales of \$1.7-milon and profits of \$58,000, Trans Caribought two more DC-4s and looked to a alcyon future.

For a while, 1948 was even better. Jost of the established airlines were a fiscal troubles, but Trans Carib's rofits in the first six months were 66,500. Then the CAB issued an edict



DINING ROOM for Transit brass has antiques collected by Chalk, decor by his wife.



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Mills at Miguon, Pa., and Plain Offices in New York, Chicago, Los Angeles that nonskeds could originate only 10 overseas flights a month from the U.S The marginal outfits immediately began to fold. Chalk found a way to keep Trans Carib going: "The rule said noth ing about originating flights overseas, he explains, "so we flew from Venezuel to Bermuda, then to Europe." But b vearend, profits were down to a thi \$14,500 on \$2.5-million in sales.

• Riding the Storm-Matters grewworse in 1949. Venezuela, Italy, and Israel all set up their own national air lines and revoked Trans Carib's right to land. The books for the year showe a loss of several hundred thousand do lars. Rather than try to keep all hi seven planes flying, Chalk chose to leas the DC-4s to bigger companies. In o der to hang on to his license as an a carrier, he operated two C-46s on hand-to-mouth basis. "That maneuve saved our lives," he says. "It kept in come coming in at negligible overhea till business opened up.

The Korean War helped Trans Cari recover even though most of its plane were then still out on lease. Chal formed the Independent Military A Transport Assn.-with Trans Carib an 10 other nonskeds-to woo busine from the services for his remaining aircraft. Soon the members were spliting \$1-million a month worth of cha ter flights. The business has grown mo

than fourfold since. From 1953 to 1957, as the line r trieved its equipment and added to the fleet, Trans Carib flourished, both of the Puerto Rican run and all over th world for the armed forces. "We we in Korea, Indochina, Europe, any plac vou can think of and some vou can't

says Chalk.

· Scheduled Status-Last year came tl big chance-CAB approval for the thre vear trial as a scheduled carrier fro New York to Puerto Rico. Trans Car had three assets: a long record of ser ice on the run, a firm order for thre DC-6s, and the argument that it w time to let a new member into tl scheduled airline club. Since last sprin Trans Carib has been flying eight reg lar round trips weekly to San Juan compared with more than 30 fligh listed by Pan American and Eastern

The new timetable puts Trans Car in better posture to build business on flyway that's amazingly busy almost vear around-and in both direction Puerto Ricans flock north as migran then flock south again with a bankre or just for vacation. Aboard Chall airliners, they find luxuries unusual economy-fare flight. The DC-6s a done up in blue, gold, and lamé insito Mrs. Chalk's design. Music fre tapes cut at home by Chalk hims soothes the customers before take-c

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probably won't last forever. Its overhead is lower because its employees are not unionized, but labor negotiations are now under way to change this.

#### II. On Terra Firma

In 1956, just when Trans Carib was reviving nicely, Chalk decided to buy into a shaky industry—public transit. The question is why.

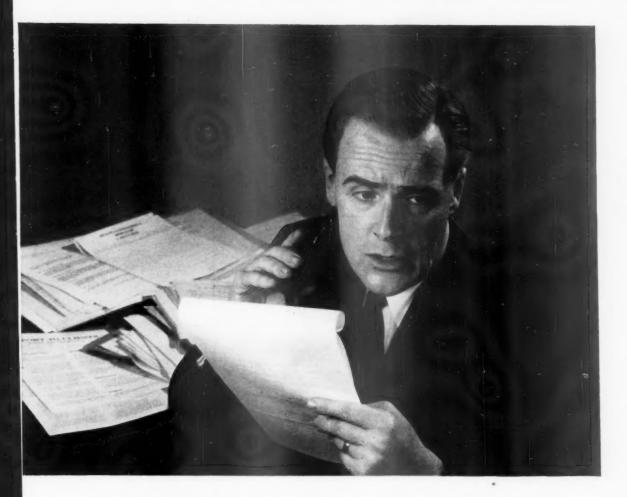
Châlk contends that Washington, D. C.'s transit system was essentially sound but needed public relations savvy to get it back on a profitable track. It also owned bits of property that might be tantalizing to a real estate man. Already Chalk is putting up a building for offices and small shops at one transit terminal point, in the midst of a shopping center.

Under the name Capital Transit Co., the system had belonged to financier Louis E. Wolfson, but he lost the franchise under fire from Congress, which runs the District of Columbia. Chalk knew his way around Washington from experience both as a lawyer and as head of Trans Carib, and he took over from Wolfson with Congressional blessings and a 20-year franchise. D. C. Transit System, Inc., was formed as a subsidiary of Trans Carib to acquire Capital Transit for \$13.5 million-\$500,000 of Chalk's money, \$9.1-million in cash from the Chase Manhattan Bank, and \$3.9-million in notes to Wolfson.

 Champagne First—After a champagne party to celebrate his new venture, Chalk set to work. He started by budgeting the company a month at a time, by now has advanced to a budget for a full year ahead. In the first six months, he was able to repay \$5.6-million in short-term notes to the Chase, Since then, he has poured everything possible into refurbishing the system, buying new equipment, and launching new projects. His flambovant touch has boosted passenger traffic-against nationwide trend. Profits last year, on \$26-million in revenue, were only \$500, 000. "But we're working on that," promises Chalk, who just last week paid off the remaining bank debt four years early with a \$2.1-million check.

The Chalk treatment for D. C. Transit has included a return to the guided tour business, which the system had abandoned under Wolfson. Sight seeing by transit—with pretty girl guide—is lavishly advertised. Chalk has also pushed charter business. Following the example he set for himself with Tran Carib, he has been recruiting military traffic and contracting to handle troop movements by bus around Virginia and Maryland. Last year's gross from al these operations was \$1-million.

Meanwhile, a subsidiary of D. C Transit, Transportation Co. of America has taken over distribution of Whit



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Truck parts and is on the lookout for other lines.

• Rainbow Hues—D. C. Transit has blossomed in other ways. Chalk has done its century-old office building over with new paint and air conditioning. An executive dining room has been installed where operating chiefs can mix with top management.

The buses and streetcars have flowered out in Chalk-selected color combinations such as flamingo, white, and green. He even insists that fare boxes be painted to match. "We were beautifying these cars, then installing the old, battered, black boxes in the middle of all that lovely color," he laments. "I had them painted, too."

• Road Blocks—The transit operation still has problems, of course. Last year's profits—themselves not spectacular—may be more than wiped out by rising costs, including scheduled wage increases. To meet the climbing costs, Chalk campaigned for—and got—a straight 20¢ fare. This replaced a system under which riders could buy tokens for 19¢ or 90¢ permits good for a week's riding plus 10¢ per trip. The increase, though is still inadequate, Chalk claims.

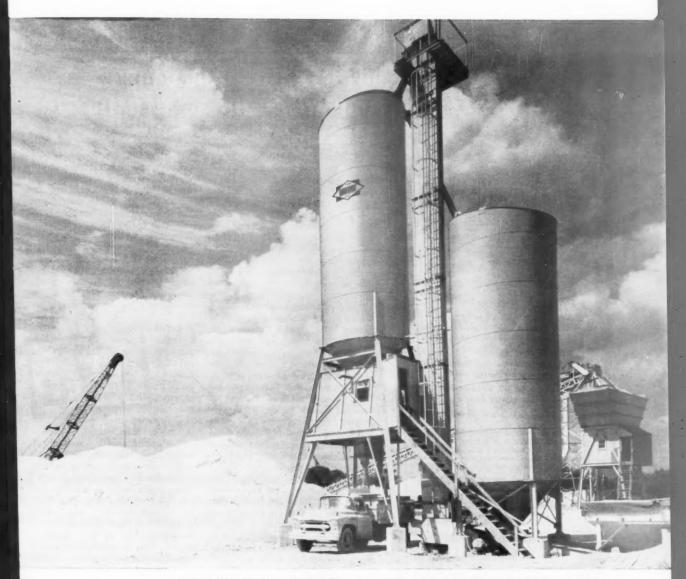
The company has agreed to tear up its trolley lines and run nothing but buses—which would be cheaper to operate But it would prefer to delay the change because conversion would cost some \$25-million and make a lot of still use ful rolling stock worthless.

Another nettle is an argument with the district's commissioners over the rate base for figuring profits.

· Elaborate Plans-But whatever the problems, Chalk goes on laving lavisl plans. D. C. Transit has applied fo permission to run a de luxe limousine service from Washington to New Yorl and its airports. At \$12 a head, passen gers would be whisked between the two cities in a lounge chair, six to an elon gated, air-conditioned limousine. In hi own name, Chalk has asked for Federa Communications Commission approva of a new radio station he plans in Mary land. And, jointly with the transit sy tem, he recently proposed a \$30-million project as part of a Southwest Washing ton Redevelopment program-includin a monorail to the Pentagon, tourist ad commodations, and a restoration of Je ferson-era buildings.

In his private life, Chalk is no les exuberant. He lives in an apartmer building he owns along New York upper Fifth Avenue. His daughter an son-in-law have the same address. "W tore down the old penthouse and builthem a brick ranch house," Chalk relates. "The dirt up there is 8 ft. dee so they can have a few trees. It's a nic suburbia right here in the city." The latest bucolic touch: an automatic sprinkler system for the expanse of loft

wn. END



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#### THE MANAGEMENT PATTERN

# Taxing Those "Expenses"

N owdays it's often taken for granted that, since taxes eat up so much of an executive's salary, a company has a virtual obligation to supply some additional benefits not subject to straight income tax rates. These benefits can take any number of forms—from stock options and deferred payment plans to unlimited expense accounts and "business-vacations."

But expense accounts in lieu of official salary have been getting an increasingly jaundiced eye from the Internal Revenue Service. Estimates of the amounts charged off against taxes under "expense account" headings range anywhere from \$5-billion to \$10-billion annually. While it's generally conceded most are legitimate charges, IRS is concerned that there has been enough artificial loading of expense claims to drain off substantial tax revenues. Tax men argue-and companies will often concede-that the expense account has on occasion become a deliberate tax evasion scheme.

From the IRS standpoint, the problem has been what to do about it. The recent attempt, via "line 6a" of the income tax form, to require detailed reporting of all "reimbursed business expenses" raised such protests that the requirement

was quickly softened.

Now two experts on executive compensation—V. Henry Rothschild and Rudolf Sobernheim, writing in the Yale Law Journal—have come up with another suggestion: Where an "expense account" item clearly represents a joint attempt by a company and an employee to evade taxes, slap an extra penalty on the company and, by making it costly enough, discourage the practice.

A CTUALLY, IRS has long required all employees to include in personal tax returns the total received as reimbursement for business-incurred expenses. Last year's requirement for detailed reporting was an effort to tighten up, but after 10 confused weeks, IRS withdrew somewhat. It ruled that employees whose expenses are approved by superiors need not report. But that left the same loophole open.

The problem has been this: IRS has frequently disallowed, on corporate tax returns, excessive or outlandish "expense" items—the hunting lodge, the European trip, the mink coat. But on its own return, the company could simply switch the item to "compensation," with no change in its own taxes, and only minor embarrassment. With one set of IRS inspectors checking corporate returns, another set personal returns, the latter were not always told that the individual concerned now had more taxes to pay.

HE IRS has already found one answer to abuses by closely held corporations in which the individual challenged is also a major stockholder. When such a company picks up the individual's personal expenses, IRS holds it to be a distribution of corporate profits, not compensation—and so, like dividends, not a deductible expense.

Rothschild and Sobernheim would apply this principle to larger public corporations, where the employee is not a major stockholder. They would forbid switching a disallowed "business expense" claim to "compensation," and would make a disallowed item totally non-deductible in the corporate return. They argue that this would make the practice expensive enough to discourage it, since the government would no longer in effect pick up 52% of the "benefit" tab.

The sum, of course, would become taxable to the individual. To close the loophole of his failure to report it, Rothschild and Sobernheim would make companies file separate information returns, listing all employees getting over a certain amount in "expenses"—with specific amounts and reasons—and all "special facilities made available only to a single executive or group of executives."

The two lawyers concede that their program, calling at best for extra company work and at worst for substantial monetary loss, will arouse opposition. But they insist its pocketbook effect would make it workable. The business areas long subject to special scrutiny—banks, insurance companies, utilities—they argue, have shown the least abuse of expense accounts.

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#### MANAGEMENT BRIEFS

The battle of the credit cards between established Diners' Club, Inc., and new entrant American Express Co. (BW—Aug.16'58,p11) kept changing last week. Negotiations broke down between Diners' Club and Hilton Hotels Corpfor an exchange of stock and credit card facilities, whereby Hilton might have ended up controlling Diners'. But within days, Diners' was dickering with another hotel chain, Sheraton Corp. of America, which in turn had just broken off credit card talks with American Express. Meanwhile, American Express igned up with the Big Three auto producers to have their dealers honor its credit cards for service and repairs.

Alfons Landa, Washington lawyer, ubiquitous proxy fighter, and president of once strife-torn Penn-Texas Corp. last week bowed out of another corporate struggle. He withdrew as lawver for the Studebaker-Packard Stockholder's Protective Committee, which has filed suits against the auto company. Landa joined the committee to try to set aside S-P's management contract with Curtiss-Wright Corp. just as S-P was getting ready to clinch a new management agreement with financier and expert diversifier A. M. Sonnabend. Landa quit because of disagreements over how the stockholders' fight should be handled.

Reviving lion: Joseph R. Vogel, president of Loew's, Inc., and last year's victor in a noisy fight for control of the movie giant (BW-Aug.17'57,p43), announced that Loew's Metro-Goldwyn-Mayer movie producing studios after years of red ink are running in the black. Despite pressure from a faction of his board to spin off the studios, Vogel hopes to hold on to them.

Stauffer Chemical Co. is entering a new field. Already involved in a fistful of joint companies (BW-Jul.19'58, p49), Stauffer is now delving into pharmaceuticals through a new company owned 50-50 with E. Merck AG, German drug house. The new company will make and market in the U. S. items already in the Merck German line.

Bellanca Corp. has come full circle. Stockholders of the big polyglot that mushroomed from L. Albert & Son, Akron rubber machine rebuilder, have voted to sell that division, practically its last going concern. That is, the stockholders who could be located have voted to that effect—Bellanca's management says it couldn't find about one-third of the company's 1.7-million stockholders, moved since the previous "annual" meeting in April, 1956.

# clues

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# Needed: New Strategy to Fight Inflation

The Federal Reserve and the Treasury today face one of the most serious dilemmas in the long and often unhappy history of monetary management. Their problem: how to finance the huge government deficit, estimated at \$12.2-billion, without the risk of ruinous inflation.

A deficit of that size, the largest in peacetime history, would be hard to handle even under the best of conditions. And, conditions in the money markets today are anything but good. The government bond market, which this summer took the worst beating in modern times, simply is in no shape to absorb large amounts of new Treasury offerings.

Both the Treasury and the Fed share responsibility for the sad state of the market and the unreceptive attitude of investors. The Treasury tried to sell too many long-term bonds in too short a time period, creating a severe case of indigestion in the market. The Fed, after a half-hearted attempt to stem the disorder, gave up its efforts in the belief that it should follow a "flexible policy" and not interfere with the workings of the marketplace.

Moreover, as soon as recovery became apparent, the money managers abandoned their traditional circumspection to warn that credit would be tightened promptly in order to combat inflation. Instead of reassuring investors, the Fed's zeal in fighting inflation had the perverse effect of encouraging inflationary fears. The result is that investors—still bruised from their experience last summer—are reluctant to buy bonds at any price. And the Treasury has no choice but to sell short-term issues to the commercial banks, which adds to the money supply.

Inflationary fears also stem from the very size of the deficit. The Administration may take some economizing steps, but it is unlikely that these will pare the deficit by any substantial amount.

The deficit and the bond market are the painful realities that the Fed and the Treasury must deal with. And to deal with them successfully the money managers will have to take another look at some of the classic theories of credit control.

There is some indication that the money managers have recognized that orthodoxy is not the solution to the current problem (page 23). They have abandoned the heavy-handed approach they utilized earlier in the recovery and are attempting to reassure the financial community that they will not press restrictiveness too far. This is a hopeful sign, but it will have to be followed by more definite evidence of new flexibility if the Fed hopes to undo the damage that the past few months have done to the government's credit.

No one wants the Fed to go back to the practice of pegging government bond prices. But the alter-

native to pegging is not necessarily a disastrous policy of hands-off-no-matter-what. Somewhere in between there lies a middle way. And along that middle way lies a truly flexible policy that will make the best of a bad situation and restrain the inflationary effects of the deficit as much as possible. It's vitally important for the Treasury and the Fed to sit down now and work out such a policy with all the imagination and ingenuity they can muster.

# No Short Cut to Power

In its annual report for 1957-1958, the World Bank has warned the underdeveloped countries not to count yet on atomic energy as a source of power. At their present stage, says the Bank, nuclear reactors are appropriate only in countries with large electric power systems and high demand.

This conclusion is right in line with the consensus reached at the second U. N. International Conference on the Peaceful Uses of Atomic Energy, held in Geneva last month (BW—Sep.13'58,p37). The scientists at this meeting not only dismissed power from fusion as a practical proposition in the next generation even for the advanced countries but agreed that atomic energy, as released in fission, was not at present an economical power source for the underdeveloped countries. Thus the world's atomic scientists exploded the idea, which had gained currency after the 1955 Geneva Conference, that atomic energy would be a panacea for nations such as India.

For the underdeveloped countries, this new assessment of atomic energy must be something of a blow. Gone are their dreams of a short-cut to industrialization that would rather quickly close the gap between their living standards and those of the advanced industrial nations.

It is fortunate, therefore, that the U.S. chose this year's meetings of the World Bank and International Monetary Fund to push for an increase in the resources of both institutions and for the creation of an International Development Assn. to be affiliated with the World Bank (BW—Oct.11'58,p26). In this way, Washington expects to ease the industrialization problems of the underdeveloped countries and to keep them linked to the Free World economy.

For several years now the World Bank has been making a major contribution to the industrialization of the emerging countries. With new resources, and a new affiliate, the World Bank will be able to continue this task in a constructive way. Perhaps it will even be able to contribute more, at this stage, to the sound development of these countries than would any sudden atomic energy breakthrough.

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